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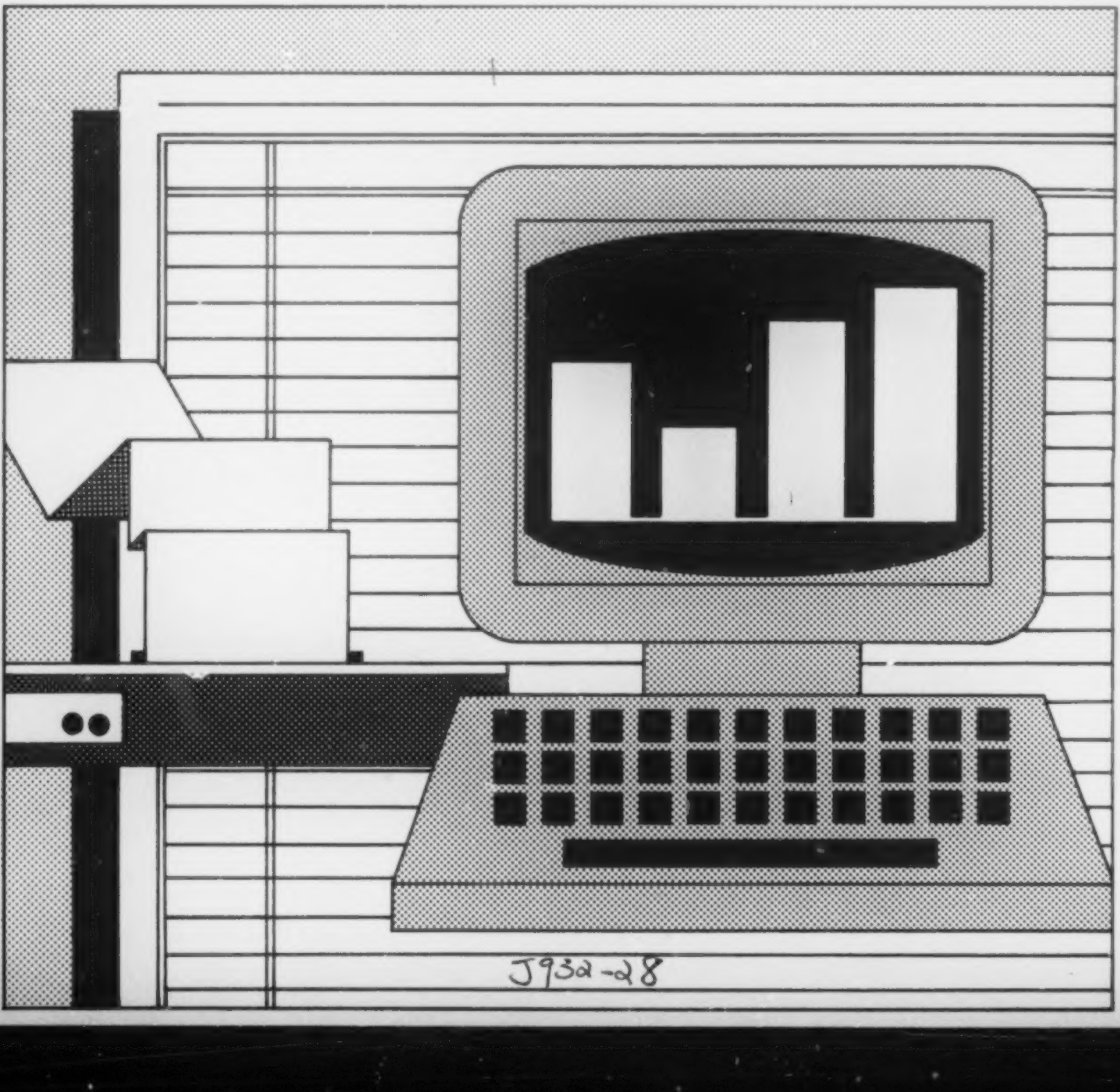

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THE ECONOMIC AND BUDGET OUTLOOK: AN UPDATE

A Report to the
Senate and House
Committees on the Budget

As Required by Public Law 93-344

The Congress of the United States
Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to in Chapter I are calendar years and all years in Chapter II are fiscal years.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Details in the text and tables of this report may not add to totals because of rounding.

In figures showing periods of recession, shaded areas indicate the months between cyclical peaks (P) and recession troughs (T).

The Balanced Budget and Emergency Deficit Control Act of 1985 (commonly known as Gramm-Rudman-Hollings) is also referred to in this volume more briefly as the Balanced Budget Act.

All National Income and Product Accounts data in this volume do not reflect the July 27, 1989, revisions.

PREFACE

This volume is one of a series of reports on the state of the economy and the budget issued periodically by the Congressional Budget Office (CBO). In accordance with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook presented in Chapter I was written by John F. Peterson of the Fiscal Analysis Division under the direction of Frederick C. Ribe and Robert A. Dennis. The underlying analysis was carried out by Trevor Alleyne, Robert Arnold, Victoria Farrell, Douglas R. Hamilton, George Iden, Kim Kowalewski, Angelo Mascaro, Frank S. Russek, Jr., John Sabelhaus, Matthew A. Salomon, John R. Sturrock, and Stephan S. Thurman. Research assistance was provided by Mark Decker, Jeanne Dennis, Nicholas Dugan, and Patricia Phill.

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Paul L. Houts and Sherry Snyder supervised the editing and production of the report. Major portions were edited by Sheila T. Harty and Francis S. Pierce. The authors owe special thanks to Linda Brockman, Marion Curry, Janice Johnson, Dorothy J. Kornegay, and L. Rae Roy, who typed the many drafts. Kathryn Quattrone prepared the report for publication.

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Director

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SUMMARY

The Congressional Budget Office (CBO) estimates that the fiscal year 1989 federal budget deficit will total $161 billion, a bit higher than the 1988 level of $155 billion. Even with no further changes in budgetary policies, the deficit is projected to drop to $141 billion in 1990 and to remain around that level for the next several years. Carrying out the budget agreement that the Congress and the Administration negotiated earlier this year would produce about $15 billion each year in permanent deficit reduction and $9 billion in one-time savings in 1990.

The budget projections assume that the economy will continue to grow during the rest of calendar years 1989 and 1990 at the subdued pace of early 1989. Signs of inflationary pressures and the absence of fiscal restraint prompted the Federal Reserve to maintain a restrictive monetary policy throughout most of 1988 and early 1989. While the economy did not respond promptly to the higher interest rates that resulted, signs of slower growth began to appear in the spring of 1989, and by June the Federal Reserve felt able to loosen policy. Further declines in the federal deficit will permit this monetary easing to continue and will foster economic growth in the long run. CBO's forecast reflects the strong consensus among economists that the recent slowdown will not turn into a recession, although calculations with economic models indicate that there is about a one-in-five chance that a recession will begin during the next nine months.

THE BUDGET OUTLOOK

CBO's baseline deficit projections are little changed from those published in February 1989. The current estimate of the fiscal year 1989 deficit--$161 billion--is only $2 billion higher than the February figure. And the 1990 baseline projection--$141 billion--is just $5 billion lower. The baseline reflects policies in effect on August 15. Therefore, it does not include those provisions of the budget summit agreement between the Congress and the Administration that remain to be put in place. If all of the provisions of the budget agreement are carried out, the 1990 deficit could be as low as $118 billion, or $124 billion excluding the effects of asset sales. The Balanced Budget Act calls for a 1990 deficit of $100 billion excluding asset sales, but it allows the deficit as estimated by the Administration to reach $110 billion before triggering across-the-board spending cuts, or sequestration.

Baseline Budget Projections

Summary Table 1 displays CBO's baseline budget projections and the underlying economic assumptions. The baseline projections are designed to show what would happen if current budgetary policies were to continue without change. For revenues and entitlement spending, the baseline generally assumes that laws now on the statute books will continue. For defense and nondefense discretionary spending, the projections for 1990 through 1994 are based on the 1989 appropriations, increased only to keep pace with inflation.

Under these assumptions, the deficit is projected to fall from $161 billion in 1989 to $141 billion in 1990. Compared with the size of the economy, the deficit shrinks from 3.1 percent of gross national product (GNP) in 1989 to 2.6 percent in 1990. Revenues are projected to increase from 19.3 percent of GNP in 1989 to 19.6 percent in 1990, largely because of previously legislated tax increases that boost 1990 tax collections by more than $20 billion. No growth in defense spending and a projected drop of $12 billion in on-budget deposit insurance spending cause baseline outlays to decline from 22.4 percent of GNP in 1989 to 22.2 percent in 1990.

The baseline deficit remains flat in 1991 through 1993. Outlays rise less rapidly than GNP because of the assumption that discretionary programs grow only at the rate of inflation and because of projected declines in interest rates. The ratio of taxes to GNP, however, also drifts slowly downward, as most taxes other than the personal income tax fail to keep pace with the growth of the economy. The baseline deficit for 1993--the year the budget is to be balanced--is stubbornly stuck at $143 billion.

SUMMARY TABLE 1. BASELINE BUDGET PROJECTIONS AND UNDERLYING ASSUMPTIONS

	1988	1989	1990	1991	1992	1993	1994
Budget Projections (By fiscal year)[a]							
In billions of dollars							
Revenues	909	991	1,071	1,138	1,207	1,287	1,372
Outlays	1,064	1,152	1,212	1,282	1,348	1,430	1,500
Deficit	155	161	141	144	141	143	128
Deficit Targets[b]	144	136	100	64	28	0	--
As a percentage of gross national product							
Revenues	19.0	19.3	19.6	19.5	19.4	19.3	19.3
Outlays	22.3	22.4	22.2	22.0	21.7	21.5	21.1
Deficit	3.2	3.1	2.6	2.5	2.3	2.1	1.8
Economic Assumptions (By calendar year)							
GNP (Billions of current dollars)	4,864	5,223	5,549	5,923	6,329	6,763	7,226
Real GNP Growth (Percentage change)	3.9	2.8	1.7	2.3	2.5	2.5	2.5
Implicit GNP Deflator (Percentage change)	3.5	4.5	4.4	4.3	4.3	4.3	4.3
CPI-U (Percentage change)[c]	4.1	5.2	4.7	4.6	4.6	4.6	4.6
Civilian Unemployment Rate (Percent)	5.5	5.3	5.5	5.6	5.6	5.6	5.6
Three-Month Treasury Bill Rate (Percent)	6.7	8.2	7.2	6.8	6.5	6.3	6.1
Ten-Year Government Note Rate (Percent)	8.8	8.6	8.2	8.1	7.9	7.7	7.6

SOURCE: Congressional Budget Office.

a. The baseline projections include Social Security, which is off-budget.

b. The Balanced Budget Act established targets for 1988 through 1993.

c. CPI-U is the consumer price index for all urban consumers.

Recent Changes in the Budget Projections

On August 9, the President approved the Financial Institutions Reform, Recovery, and Enforcement Act. The new law is primarily intended to deal with the federal government's huge liabilities for insured deposits in failed and insolvent savings and loan institutions. It establishes several new federal agencies and provides a complex mix of additional on- and off-budget financing. CBO estimates that the legislation will add $14 billion to the federal deficit in 1989, $4 billion in 1990, and a total of $10 billion in 1991 through 1994. This adds to the $50 billion in previously anticipated net outlays for thrift insurance included in the CBO February baseline. In addition, $37 billion in spending will be financed by off-budget entities and another $37 billion by deposit insurance premiums and other offsetting collections. Despite the expenditure of more than $150 billion over the 1989-1994 period, CBO believes that the resources provided will be insufficient to solve the savings and loan problem. Other recent legislation--a supplemental appropriation and drought assistance to farmers--adds a total of $1 billion to $2 billion per year to the projected baseline deficit.

While this new legislation adds to the projected deficit in 1989 and 1990, CBO's updated economic and technical estimating assumptions tend to offset these increases, as shown in Summary Table 2. CBO's estimate of 1989 revenues has increased by $8 billion since February, reflecting the unanticipated strength of tax payments in the first 10 months of the fiscal year. Economic and technical factors lower estimated outlays by $4 billion in 1989 and $9 billion in 1990. The 1990 reestimates reflect $4 billion from advancing some military pay and farm outlays into 1989, $4 billion in lower interest rates and debt service, and $1 billion in other changes. Economic and technical changes in the deficit projections are small after 1990.

Carrying Out the Budget Resolution

In April 1989, the Administration and the Congressional leadership agreed to a deficit reduction plan for fiscal year 1990. In May, the Congress adopted a budget resolution consistent with this summit agreement. CBO estimates that fully implementing the budget resolution would reduce the deficit to $118 billion in 1990--$23 billion below the baseline level of $141 billion (see Summary Table 3).

Permanent spending cuts and tax increases would account for about $14 billion of the reductions. More than one-third of the reductions, however, would consist of accounting changes, one-time savings, and asset sales that would not reduce the deficit in the long run.

The pressure to achieve the full amount of deficit reduction contemplated in the budget resolution may be lessened, however, when the Office of Management and Budget (OMB) releases its initial sequestration report on August 25. OMB's deficit estimates are more optimistic than CBO's, and the Balanced Budget Act gives OMB the

SUMMARY TABLE 2. CHANGES IN CBO BASELINE DEFICIT PROJECTIONS SINCE FEBRUARY
(By fiscal year, in billions of dollars)

	1989	1990	1991	1992	1993	1994
February 1989 Baseline[a]	159	146	146	140	135	130
Changes						
Enacted legislation						
Savings and loan bill	14	4	-2	b	11	1
Drought bill and supplemental appropriations	1	2	1	1	1	2
Subtotal	15	6	-1	1	13	3
Updated economic and technical estimating assumptions						
Revenues[c]	-8	-2	3	2	-7	-13
Outlays	-4	-9	-4	-1	1	8
Subtotal	-12	-11	-1	b	-5	-5
Total changes	2	-5	-2	1	7	-2
August 1989 Baseline[a]	161	141	144	141	143	128

SOURCE: Congressional Budget Office.

a. The baseline projections include Social Security, which is off-budget.

b. Less than $500 million.

c. Revenue increases are shown with a negative sign because they reduce the deficit.

responsibility for determining whether the act's deficit targets are being met. Based on the information provided in the *Mid-Session Review of the Budget*, OMB is likely to estimate a baseline deficit of approximately $116 billion. This figure exceeds the sequestration threshold by only $6 billion--far less than the $23 billion in reductions assumed in the budget resolution.

SUMMARY TABLE 3. FISCAL YEAR 1990 BUDGET RESOLUTION AS ESTIMATED BY CBO (By fiscal year)

	1990	1991	1992	1993	1994
In Billions of Dollars					
CBO Baseline Deficit[a]	141	144	141	143	128
Proposed Policy Changes					
Permanent deficit reduction and programmatic adjustments[b]	-14	-17	-16	-16	-16
Accounting changes, one-time savings and asset sales	-9	c	-1	1	1
Total Policy Changes	-23	-17	-17	-15	-15
Budget Resolution Deficit	118	127	124	128	112
As a Percentage of Gross National Product					
CBO Baseline Deficit	2.6	2.5	2.3	2.1	1.8
Budget Resolution Deficit	2.2	2.2	2.0	1.9	1.6

SOURCE: Congressional Budget Office.

a. The 1990 baseline deficit includes savings from shifting the military pay date ($2.1 billion), advancing farm deficiency payments ($850 million), and writing off uncashed food stamps ($477 million).

b. Programmatic adjustments represent additional spending for subsidized housing and other programs assumed in the budget resolution.

c. Less than $500 million.

Failing to meet the budget resolution targets in 1990, however, would make the task of reducing the 1991 deficit that much harder. Because of identifiable one-time savings, the budget resolution is estimated to save only $17 billion in 1991, as compared with $23 billion in 1990. The resulting 1991 deficit would be $127 billion--$63 billion over the target of $64 billion, and $53 billion above the level required to avoid sequestration. If some of the as yet unspecified 1990 savings are also achieved through accounting changes or timing shifts, or if some of the savings are not accomplished at all, the further cuts needed in 1991 would be even larger.

THE ECONOMIC OUTLOOK

The pace of economic expansion slowed sharply during the first half of calendar year 1989, and CBO, like many other forecasters, expects that the economy will continue to grow during the rest of 1989 and 1990 at the slower pace of recent months. As a result, CBO forecasts a slight increase in unemployment, an easing of inflation, and a gradual decline in short-term interest rates. CBO does not attempt to forecast the state of the economy after 1990 but instead prepares projections based on historical trends in the labor force and productivity. The projections show real growth in 1991 through 1994 of about 2½ percent a year--roughly the estimated rate of growth of potential GNP.

CBO forecasts that real GNP will grow by 2.4 percent in 1989 on a fourth-quarter-to-fourth-quarter basis, and by 2.0 percent in 1990 (see Summary Table 4). The unemployment rate, 5.2 percent at midyear, is expected to average 5.5 percent in 1990. Consumer prices are projected to rise at an annual rate of 4.7 percent during the remainder of 1989 and 1990, as food and energy price increases subside. For the GNP deflator, CBO currently projects growth of 4.2 percent in 1989 and 4.4 percent in 1990.

CBO's forecast of a sustained slowdown in economic growth reflects the effects of monetary restraint by the Federal Reserve System in 1988 and the beginning of 1989. By early 1988, virtually all of the economy's productive capacity was in use, and further rapid growth threatened to raise inflation. Moreover, the budget agreement for fiscal years 1988 and 1989, negotiated in November 1987, provided for little additional deficit reduction in its second year. Monetary policy therefore had to bear the full burden of controlling inflation. Although the economy did not respond immediately to the Federal Reserve's tightening, the resulting rise in interest rates began to slow the economy in early 1989.

By mid-1989 inflationary pressures had subsided, and the Federal Reserve felt able to loosen policy slightly. Both short- and long-term interest rates have declined by more than one percentage point since March. CBO forecasts that short-term interest rates will continue falling gradually, while long-term rates will remain near present levels.

The tight monetary policy of 1988 and early 1989 and the strong rise in the dollar during the first half of this year have started to slow

SUMMARY TABLE 4. CBO FORECAST FOR 1989 AND 1990

	Actual		Forecast	
	1987	1988	1989	1990
Fourth Quarter to Fourth Quarter (Percentage change)				
Real Gross National Product	5.0	2.8	2.4	2.0
Real Nonfarm GNP	5.3	3.6	1.8	2.0
Implicit GNP Deflator	3.1	4.3	4.2	4.4
Consumer Price Index (CPI-U)[a]	4.4	4.3	5.3	4.7
Calendar-Year Averages (Percent)				
Three-Month Treasury Bill Rate	5.8	6.7	8.2	7.2
Ten-Year Government Note Rate	8.4	8.8	8.6	8.2
Civilian Unemployment Rate	6.2	5.5	5.3	5.5

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. CPI-U is the consumer price index for all urban consumers.

the growth of fixed investment and net exports--categories of demand that had been leading the expansion. CBO now projects a sustained slowing in the growth of both, though the slowing will be more pronounced in net exports. Investment and net exports are especially important as sources of longer-term improvement in standards of living.

Recent developments have raised fears that the tight monetary policy of the past year may already have sown the seeds of a recession. The index of leading indicators, which is a measure of the future strength of the economy, has fallen in four of the last five months. Statistical models indicate that the risk of recession has increased in the past six months. While few forecasters expect a recession, concern is more widespread that the economy will experience an extended period of slow growth with relatively high inflation.

The likely persistence of inflation of 4½ percent to 5 percent, as forecast by CBO, is a source of concern. Many economists believe that the only way to bring down the inflation rate would be to endure an extended period of economic growth slower than that in the CBO forecast. Others express optimism that declining inflation and strong growth can coexist. They point to the possibility that credible and tight monetary policy may curb wage and price demands, and to a number of developments that could speed the growth of productivity. Little solid evidence exists, however, for these optimistic possibilities.

While the federal deficit is projected to decline in 1990, even with no change in policies, it will still be high by postwar standards. Continued large deficits exacerbate several major problems of the economy--a low saving rate, a large trade deficit, and mounting foreign debt--all of which impair economic growth. Further deficit reduction would help the American economy grow more rapidly in the long run.

CHAPTER I

THE ECONOMIC OUTLOOK

During the first half of 1989, after a year of monetary stringency, economic growth in the United States finally slowed. The combination of strong growth and a relatively low rate of unemployment during 1988 had raised fears of a major increase in inflation, but the slowdown in growth helped ease those fears.

The Congressional Budget Office (CBO) forecasts that economic growth will remain slow through 1990, but that the economy will avoid both a recession and a further increase in inflation. CBO expects the unemployment rate to be marginally higher next year, and it forecasts that the underlying rate of inflation--inflation for all consumer items except food, energy, and used cars--will remain near its current 4.6 percent rate even though growth will be below average for the postwar period.

Developments influencing this forecast include not only the continuing effects of the recent monetary tightening, but also Congressional efforts to reduce the budget deficit, and a recent slowing in the growth rates of net exports and business investment--sectors that have been leading the economic expansion in recent years. The first two sections of this chapter discuss these developments, while the third section discusses the forecast in detail, together with the risk of recession. The last section goes beyond the forecast to discuss the outlook for inflation and the measures that economists believe may be necessary to reduce it.

INFLATIONARY PRESSURES AND THE RESPONSE OF MONETARY POLICY

The U.S. economy was using a high proportion of its resources early in 1988. Because demand was growing rapidly and threatened to touch off a sharp increase in inflation, the Federal Reserve instituted a restrictive monetary policy that caused interest rates to rise rapidly until this spring. This policy has reduced the growth of demand and appears to have been instrumental in preventing the underlying rate of inflation from rising significantly this year. By midyear, expectations of inflation had eased, monetary policy had loosened, and interest rates had softened.

The U.S. Economy Near Potential

In the aftermath of a recession, when an economy has a substantial pool of unused resources, rapid growth in demand can lead to rapid gains in real production and little, if any, additional inflation. In the period between the end of the 1982 recession and early 1988, the U.S. economy had such unused resources, and a high rate of growth took place without exacerbating inflation (see Figure I-1).

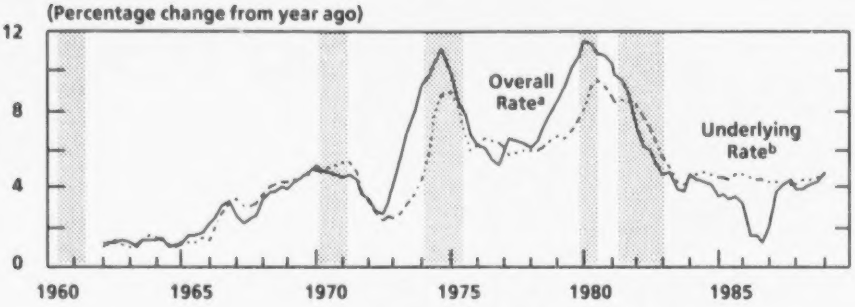
Currently, however, the U.S. economy has few resources that can be readily used for additional production. The economy is operating near its potential--the level of output that is consistent with a constant rate of inflation. Therefore, if demand grows faster than the economy's ability to produce, which is determined by the growth of the labor force and labor productivity, inflation is likely to speed up. CBO estimates, as does the Federal Reserve, that the trend rate of growth of the economy's productive capability is currently about 2½ percent a year. If the labor force or productivity increase faster, or if the response of wages and prices to constraints on capacity is more restrained than CBO anticipates, the growth of potential output will be higher than assumed in this forecast. Most estimates of potential growth are similar to those of CBO, however, and given recent developments in labor markets and prices, few additional resources could be readily used to supplement the trend rate of growth without worsening inflation.

Labor Markets

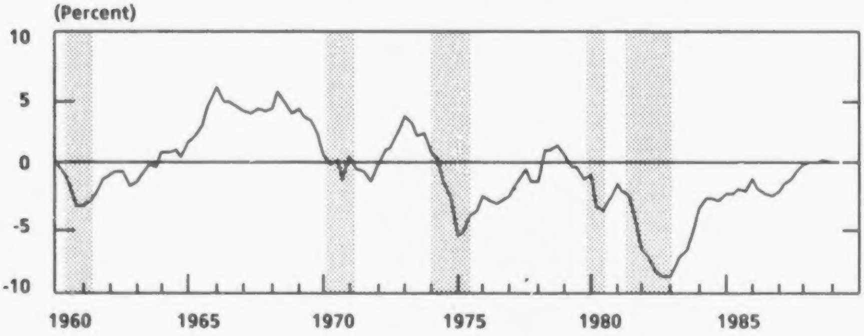
Among the most important signs that the economy is near its potential are the tightness of labor markets and increases in unit labor costs. Although the rate of job growth has eased and pressures in labor markets

Figure I-1.
Inflation and Resource Use

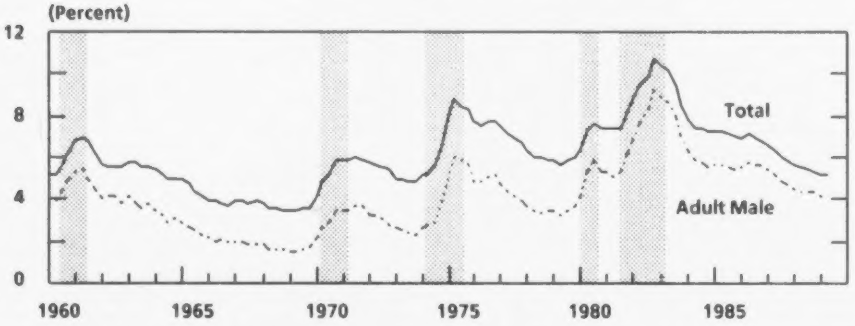
Measures of Inflation



Difference Between Gross Domestic Product and Potential[c]



Civilian Unemployment Rates



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis.

a. CPI-U from January 1983 to present; before that time, the series incorporates a measure of homeownership conceptually similar to that of the current CPI-U.

b. Consumer price index for all urban consumers (CPI-U) excluding food, energy, and used cars.

c. The Congressional Budget Office's method of calculating potential gross domestic product is described in Appendix B of *the Economic and Budget Outlook: An Update* (August 1987).

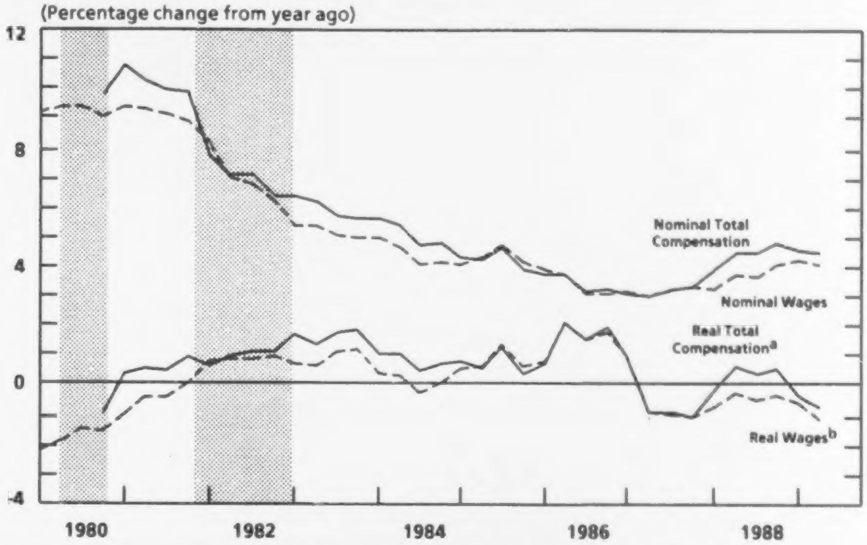
in general do not appear to have intensified in the last few months, labor market conditions suggest the economy is currently operating near capacity.

Employment and Growth in the Labor Force. The unemployment rate has fallen to a level low enough to suggest that labor markets are tight. After having declined rapidly for the last three years, the unemployment rate stabilized at about 5.3 percent in the first half of this year. Employment, as measured by the household survey, grew by 2.3 percent in 1988; by the second quarter of 1989, however, it slowed to 1.3 percent. Some slowing occurred in almost all sectors of the economy, but the slowdown was pronounced in manufacturing employment, which dropped from a rate of 2 percent during 1988 to zero growth in the second quarter of 1989. Because growth in the labor force slowed in concert with the slowdown in the growth of employment, tightness in the labor market did not slacken.

Compensation and Productivity. In part because of the tightness of labor markets, unit labor costs--labor compensation costs per unit of output--have been increasing recently and are contributing to inflationary pressures. Over the past year, growth in compensation has picked up, while growth in productivity has slowed. In fact, nonfarm business productivity was flat between the third quarter of 1988 and the second quarter of 1989, whereas compensation per hour grew at a 5.4 percent rate (see Figure I-2). Unit labor costs, therefore, grew by about the same rate as compensation over those three quarters. In contrast, unit labor costs rose by only 3.3 percent over the four quarters ending in the third quarter of last year.

Unit labor costs are likely to rise more during the forecast period. Increases in the cost of health benefits during 1989 and the scheduled January 1990 increase in the Social Security tax rate are expected to add to growth in compensation, even though wage growth is not expected to accelerate significantly. Moreover, added inflationary pressure will arise because productivity is not likely to improve much in the sluggish economy that is forecast for 1990.

Figure I-2.
Private Nonfarm Compensation Rates



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

NOTE: Compensation rates as measured by the employment cost index.

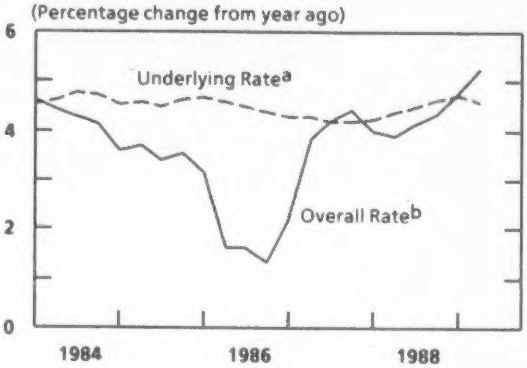
a. The employment cost index for total compensation divided by the consumer price index for all urban consumers.

b. The employment cost index for wages and salaries divided by the consumer price index for all urban consumers.

The Underlying Rate of Inflation

The underlying rate of inflation increased only slightly--from 4.4 percent in 1988 to 4.6 percent in the first half of 1989--and CBO forecasts that it will remain close to or slightly above its current pace for the remainder of 1989 and throughout 1990 (see Figure I-3). The slow growth of the economy is not expected to reduce the underlying rate of inflation because of the recent trends in compensation and growth in productivity mentioned above, and because increases in the price of petroleum in the first half of 1989 will be fully reflected in the costs of production. In addition, CBO anticipates that the dollar will depreciate and that import prices will rise in late 1989 and throughout 1990, and this combination will add to inflation.

Figure I-3.
Recent Inflation



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

a. Consumer price index for all urban consumers (CPI-U) less food, energy, and used cars.

b. CPI-U.

Monetary Policy and the Recent Economic Slowdown

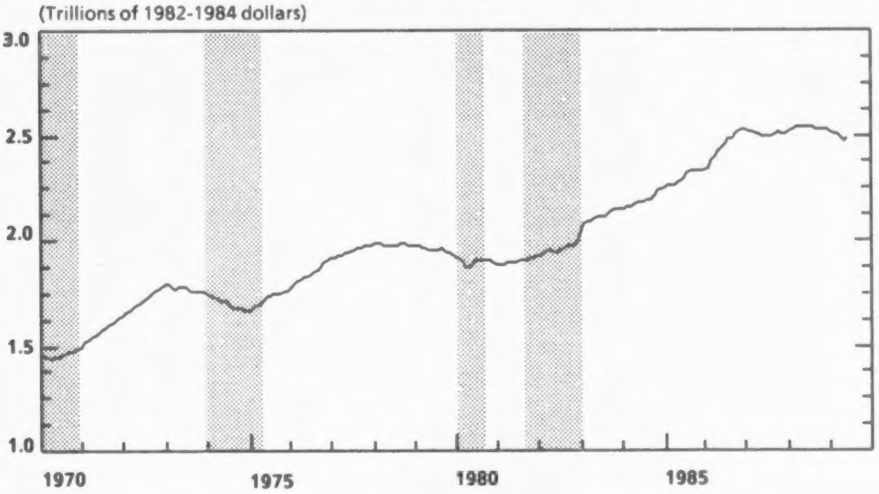
Inflationary pressures in early 1988 encouraged the monetary authorities to maintain a restrictive policy throughout most of 1988 and the first few months of this year. Monetary policy eased, however, as economic activity slowed this year.

Monetary policy was tight between the spring of 1988 and June of this year. The Federal Reserve sharply reduced the rate of growth of reserves and the money supply in 1988. The growth of both reserves and real M2 was negative from mid-1988 to mid-1989, and nominal M2 growth was far below the Federal Reserve's target ranges. Interest rates--especially short-term rates--rose significantly (see Figure I-4). The Federal Funds rate rose from 7 percent in April 1988 to almost 10 percent in March 1989, while the three-month Treasury bill rate rose by over 300 basis points to 8.8 percent. Long-term rates increased by less--about 100 basis points. Moreover, for a short period early this year, the yields on three-month Treasury bills were greater than those on 10-year Treasury notes.

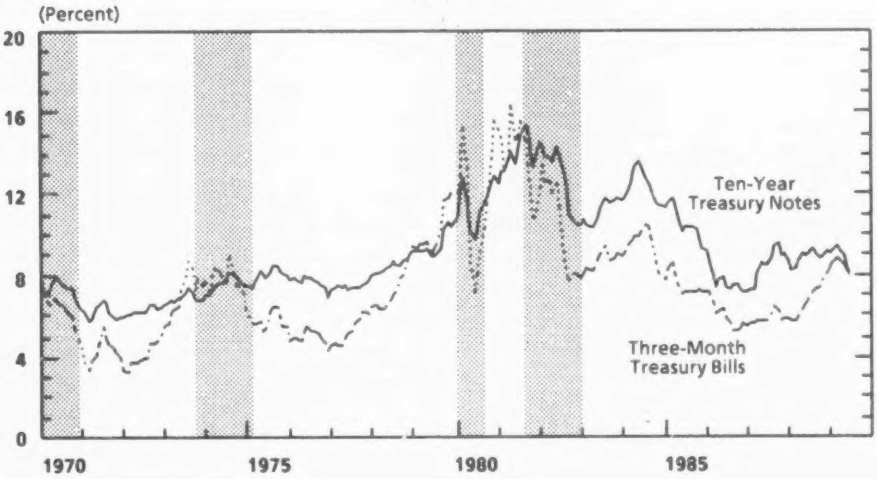
Although the economy took some time to respond to the higher interest rates, economic activity began to slow by the spring of 1989. The sectors of the economy that are sensitive to interest rates, such as housing and consumer durables, bore the brunt of monetary restrictiveness. Real consumer spending dropped significantly in the first half of the year, and housing starts declined.

Figure I-4.
Monetary Policy Indicators

Real Money Supply[a]



Interest Rates



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. M2 divided by the consumer price index for all urban consumers (CPI-U). The 1982-1984 average of the CPI-U equals 100.

Interest rates fell as economic activity slowed. Both short- and long-term rates fell over 100 basis points between March and July in response to weaker demands for credit and to easing by the Federal Reserve. The Federal Reserve did not take an active role in the first stages of the decline in interest rates. It continued to reduce reserve growth throughout April and May and therefore partially resisted the decline in interest rates. By June, however, the Federal Reserve began to loosen policy and reserve growth accelerated rapidly. Statements by the chairman of the Federal Reserve Board indicated a heightened concern about the possibility of a recession.

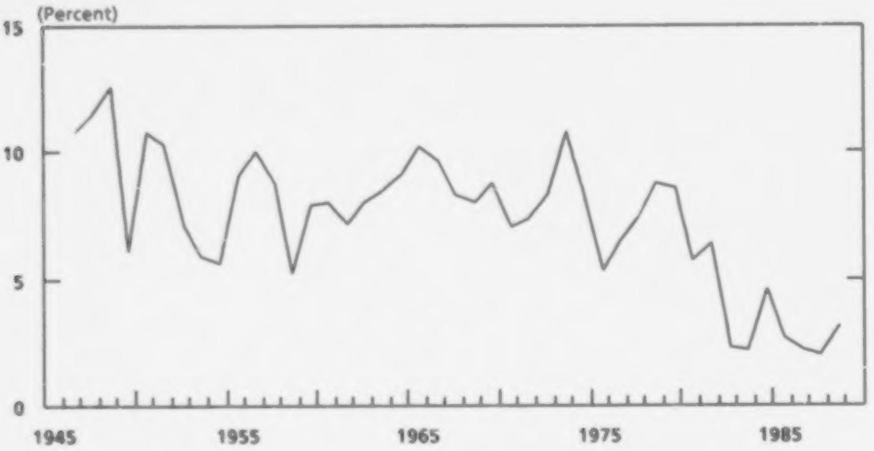
FISCAL POLICY

Assuming the May 1989 budget resolution for 1990 is fully carried out, CBO estimates that the federal budget deficit will fall to $118 billion in 1990 from its current estimate of $161 billion in 1989. Projections for later years place the deficit at $127 billion in 1991, and $112 billion in 1994 under budget resolution assumptions. As a percentage of gross national product (GNP), these figures imply a drop from 3.1 percent in 1989 to 1.6 percent in 1994. In the long run, the projected decline in the federal deficit as a percentage of GNP will contribute to a moderate increase in the net national saving rate and growth, but the saving rate will still be low compared with historical standards. Further action on the deficit will be necessary to enhance prospects for growth significantly . In the short run, the substantial decline in the deficit expected for 1990--a decline that stems largely from changes in tax law instituted before this year--will be quite restrictive. CBO anticipates, however, that the contractionary effect of fiscal policy in 1990 will be offset by an easier monetary policy.

Long-Run Benefits of Deficit Reduction

Long-run growth in living standards is affected by the nation's overall saving rate, and the saving rate, in turn, is affected by the size of the federal budget deficit. Higher saving results in greater investment in plant and equipment, thereby enhancing future output and consumption per worker. The net national saving rate reflects saving by households, businesses, and state and local governments together with fed-

Figure I-5.
Net National Saving Rate



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: The net national saving rate is total private saving less the capital consumption allowance plus government saving, all as a percentage of net national product.

eral government dissaving (that is, the federal deficit). Federal dissaving absorbs a large proportion of saving and prevents its use for investment. The fall in the national saving rate in the United States between 1980 and 1987--a fall that stemmed in part from the rapid increase in the federal deficit--worsened the long-run outlook for a rise in living standards.

The improvement in the federal budget deficit as a percentage of GNP since 1986 has contributed to the national saving rate, but the saving rate remains far below the levels that prevailed during the 1945-1981 period (see Figure I-5). Further reductions in the deficit, such as those called for in the Balanced Budget Act, will help to promote a sustained increase in the saving rate and a more robust outlook for long-term growth.[1]

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[1] See Chapter III in Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1989-1993* (February 1988).

BOX I-1

ECONOMIC EFFECTS OF LEGISLATION DEALING WITH THE SAVINGS AND LOAN CRISIS

Under the recently enacted Financial Institutions Reform, Recovery, and Enforcement Act, the federal government will spend more than $150 billion in 1989 through 1994 to resolve the savings and loan problem. These expenditures result from federal deposit insurance--a federal guarantee of the safety of most deposits in thrift institutions in case the assets of those institutions prove insufficient to back the deposits. Although a fund was set up long ago to cover possible federal payments for deposit insurance, the very large losses incurred by insured thrift institutions during the past few years have exhausted the fund.

Economists argue that spending for resolution of insolvent thrifts under the S&L legislation differs from most other federal spending because it is unlikely to exert a significant effect on private spending or on financial markets. Unlike other government outlays, the crisis resolution funds provided by the legislation do not directly buy goods or services or encourage increased private spending. The legislation does not make S&L depositors or shareholders any richer; instead, it simply replaces one claim on the federal government--guarantees of deposits in failed S&Ls--by another--the proceeds of Treasury and REFCORP borrowing. In this respect, spending under the legislation is like federal asset sales, which are widely recognized to have little economic impact.

Although borrowing under the S&L legislation removes funds from credit markets, those who receive the funds promptly return them to the

The Short-Run Outlook

Although the deficit as a percentage of GNP is projected to decline relatively slowly over the 1989-1994 period, the expected decline in 1990 will represent a significantly restrictive fiscal policy by historical standards. This restraint, which is shown most clearly after making several adjustments to the budget figures mentioned above, should relieve monetary policy of some of its burden of restraining inflation.

Measuring Fiscal Restraint. The most commonly used measure of the short-run economic impact of discretionary fiscal policy is the change in the National Income and Product Accounts (NIPA) standardized-employment deficit, not the change in the deficit on a budget basis. To compute this measure, two types of adjustments must be made to the credit stream, and the transaction is therefore unlikely to result in higher interest rates. The borrowed funds will initially be paid either to depositors in institutions that are to be closed or to the new managers of thrifts that are instead resolved by being merged with healthier institutions. In either case, the recipient of the funds is likely to return them to the credit markets, either by depositing them in a different institution (in the case of depositors) or by acquiring financial assets to back new deposit liabilities (in the case of acquirers of insolvent thrifts). Any increase in interest rates that is caused by initial Treasury or REFCORP borrowing is likely to be offset when the funds are reloaned.

The S&L crisis has, of course, had enormous economic costs, but they are largely past and are not increased by this year's legislation. Poor investments and outright fraud by thrift managers have wasted resources and made the capital stock of the U.S. economy smaller than it would otherwise have been. As a result, Americans will have less income both now and in the future.

Other costs of the crisis are related to the legislation, though in any one year they are vastly smaller than the past asset losses that triggered the crisis. The most important of these costs are interest payments on the REFCORP debt and additional federal debt incurred, and higher costs for mortgages and other borrowing from savings and loan institutions. The S&L legislation and the industry restructuring that it permits will also raise costs for S&Ls, and may allow S&Ls to increase profit margins. Both these factors will work to raise the cost of mortgages and other borrowing from S&Ls and reduce interest rates paid on deposits.

federal budget deficit. The first type of adjustment converts the deficit from a budget basis to a NIPA basis. This conversion excludes transactions that have little or no effect on economic activity (such as the exchange of existing assets and liabilities), and it changes the timing of transactions to reflect the time a credit or debit is incurred, rather than the day the Treasury makes a transaction (see Appendix B). The recent saving and loan legislation affects the deficit on a budget basis in a substantial way, but it does not affect the NIPA measure of the deficit significantly (see Box I-1).

The second type of adjustment removes the effect of the business cycle on the deficit. Adjustments are made for the automatic increase in outlays and reduction in revenues that occur in periods of subpar growth because such changes in the deficit are not indications of discretionary fiscal policy. The results reflect what the deficit would be if the economy were operating at its potential level of both output and employment.

These adjustments show that discretionary fiscal policy in 1989 is only slightly restrictive, but that it may be quite restrictive in 1990 (see Table I-1 and Figure I-6). The NIPA standardized-employment deficit as a percentage of potential GNP falls 0.3 of a percentage point in 1989, but it is projected to fall 0.8 of a percentage point in 1990. Although this amount of fiscal restraint is significant by historical standards, CBO anticipates that its contractionary effect will be mitigated by an easing of monetary policy.

Sources of the 1990 Deficit Reduction

A large part of the reduction in the deficit between 1989 and 1990--discussed in detail in Chapter II--stems from previous legislation, and the remainder from the May 1989 budget resolution for fiscal year 1990. The 1990 deficit is reduced by carrying out the following provisions of prior tax law:

- The last scheduled increase in the Social Security tax rate under the 1983 amendments to the Social Security Act takes place in January 1990;

TABLE I-1. STANDARDIZED-EMPLOYMENT DEFICIT
(By fiscal year, on a National Income and Product Accounts basis)

	1988	1989	1990	1991	1992	1993	1994
In Billions of Dollars							
CBO Baseline	137	131	108	106	102	93	83
Budget Resolution	137	131	94	90	86	76	64
As a Percentage of Potential Gross National Product							
CBO Baseline	2.8	2.5	2.0	1.8	1.6	1.4	1.2
Budget Resolution	2.8	2.5	1.7	1.5	1.4	1.1	0.9

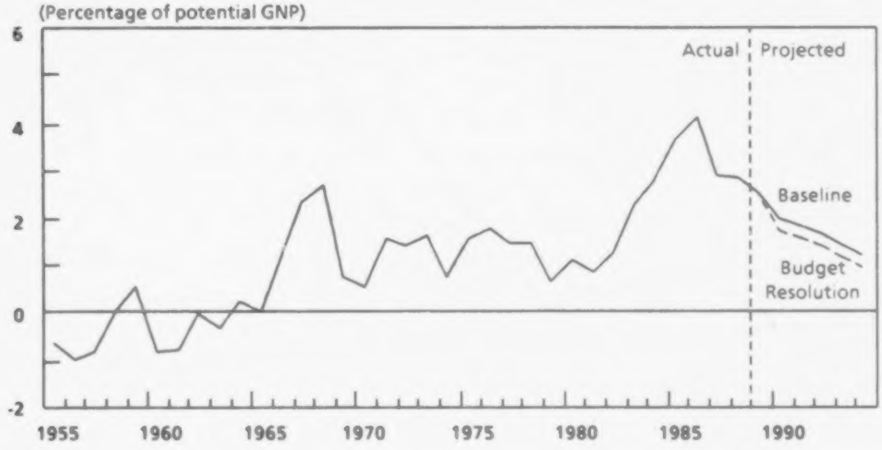
SOURCE: Congressional Budget Office.

- The effect of the provisions of the Tax Reform Act of 1986 that broaden the base of personal income taxes continue to be felt in 1990, and the lengthened lifetimes of assets in the act's provisions of capital cost recovery result in higher corporate tax revenues in that year as well; and
- The supplemental premium enacted in the Medicare Catastrophic Coverage Act of 1988 starts to generate significant revenue in 1990.

Together, these provisions will increase revenues and reduce the NIPA standardized-employment deficit by more than $20 billion in 1990.

The budget resolution would cut the 1990 federal deficit on a budget basis by about $23 billion beyond the provisions of current law. Some of the resolution's assumptions, however, imply actions such as asset sales that produce only temporary budgetary savings. About $15 billion of more substantive, permanent savings are included in the NIPA standardized-employment deficit shown in Table I-1. Half

Figure I-6.
Standardized-Employment Deficit
(By fiscal year, on a National Income and Product Accounts basis)



SOURCE: Congressional Budget Office.

of the $15 billion consists of as yet unspecified increases in revenues from taxes and fees, and half consists of reductions in spending for defense and other programs.

FORECASTS AND PROJECTIONS

CBO's economic outlook has two parts: a short-term forecast of economic conditions through 1990, which is contingent on specific policy assumptions, and a medium-term projection through 1994. The projection is not a forecast, but rather an extrapolation based on historical trends.

The Short-Run Forecast

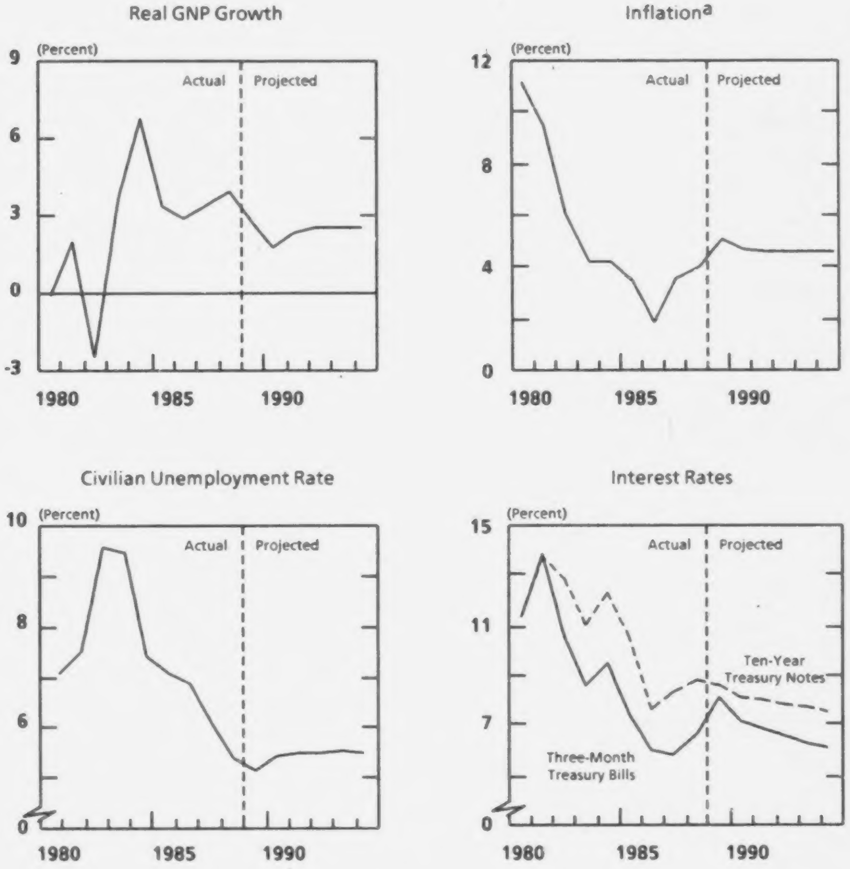
The Federal Reserve's anti-inflation policy of the past year is likely to mean that real GNP will grow much more slowly between early 1989 and the end of 1990 than it has for the past four years (see Figure I-7 and Table I-2). Real nonfarm GNP is forecast to grow 1.8 percent during 1989 (from the fourth quarter of 1988 to the fourth quarter of 1989) and 2 percent during 1990. This rate contrasts with an average annual growth rate of 3.4 percent for the past four years. Because of the farm sector's recovery from last year's drought, real GNP is likely to grow about 0.6 percentage points faster than nonfarm GNP in 1989. These figures do not reflect the revision in the GNP accounts for 1986 through the second quarter of 1989 published at the end of July. However, the revisions do not significantly affect CBO's outlook for the economy.

The underlying rate of inflation rose slightly in the first half of this year, but the slowing of growth in real nonfarm GNP is expected to stop any further acceleration. Underlying inflation is expected to be almost 5 percent over the next 18 months, up from about 4½ percent during the past four years.

Increases in food and energy prices pushed the overall rate of inflation substantially above the underlying rate in the first half of 1989. Between January and July of 1989, overall inflation averaged 5.9 percent. CBO expects energy prices to fall in the second half of 1989 and rise only slightly in 1990, while food prices will increase less

than other prices. Inflation is forecast to average 5.1 percent for all of 1989 and 4.7 percent for 1990.

Figure I-7.
The Economic Forecast and Projection


Real GNP Growth

Inflation[a]

Civilian Unemployment Rate

Interest Rates

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

a. Consumer price index for all urban consumers (CPI-U) from January 1983 to present; before that time, the series incorporates a measure of homeownership conceptually similar to that of the current CPI-U.

Labor markets are likely to remain relatively tight, which will lead to some increase in the growth of labor costs, and these higher costs will tend to restrain profits. Increases in nominal wages, which have fallen behind inflation for several years, are expected to pick up. In addition, Social Security tax rates will increase in January 1990. As a result, the growth of nonfarm compensation per hour, which has recently been running slightly above 5 percent, will increase to nearly 6 percent during 1990. This rise will limit profits, as will a slight decline in the growth of productivity linked to the slowing of production. Corporate profits, which were 6.8 percent of GNP in 1988, are expected to drop to about 5.6 percent of GNP in 1990.

CBO expects that the slowdown in the economy and the stabilizing of inflation will permit monetary policy to continue to ease, which will be reflected in lower short-term interest rates. The Federal Reserve

TABLE I-2. THE CBO FORECAST FOR 1989 AND 1990

	Actual		Forecast	
	1987	1988	1989	1990
Fourth Quarter to Fourth Quarter (Percentage change)				
Nominal Gross National Product	8.3	7.2	6.8	6.4
Real GNP	5.0	2.8	2.4	2.0
Real Nonfarm GNP	5.3	3.6	1.8	2.0
Implicit GNP Deflator	3.1	4.3	4.2	4.4
Fixed-Weighted GNP Price Index	4.0	4.5	4.6	4.8
CPI-U[a]	4.4	4.3	5.2	4.7
Calendar-Year Averages (Percent)				
Civilian Unemployment Rate	6.2	5.5	5.3	5.5
Three-Month Treasury Bill Rate	5.8	6.7	8.2	7.2
Ten-Year Government Note Rate	8.4	8.8	8.6	8.2

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Consumer price index for all urban consumers.

has eased its monetary policy noticeably since June. As a result, short-term rates are expected to continue to fall, averaging 7.2 percent in 1990.

Short-term interest rates are usually lower than long-term rates, but short-term rates were almost as high as long-term rates for a few months during the first half of the year. The CBO forecast assumes that the difference between the two rates will increase to a more normal relationship, as short-term rates fall and long-term rates remain close to their current levels.

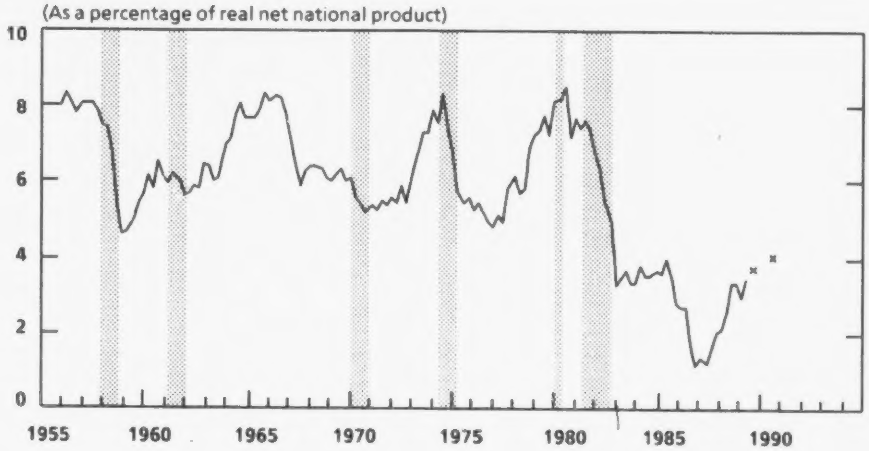
The Composition of Real Aggregate Demand. The last few paragraphs describe an overall outlook that implies slower growth for virtually all major categories of real final sales and not much change in inventories. Consumption, net exports, federal government purchases of goods and services, residential investment, and business investment in structures are all likely to be weak. The one exception is business expenditures on producers' durable equipment, which will probably continue to grow at a healthy pace, even though it will be slower than last year. Because growth in final sales is apt to be lackluster, businesses will not try to build inventories. In fact, the inventory level relative to current sales volume is generally low, except in a few areas such as automobiles. Of course, in an unexpected business downturn--sharper than CBO is forecasting--inventories could grow rapidly.

The recent downward trend in the budget deficit as a percentage of GNP has a counterpart in the composition of aggregate demand. The downward move increases the net national saving rate and permits more domestic investment to be financed with domestic savings. The greater saving in turn, has encouraged real investment and net exports to grow at a brisk pace recently. As a share of output, these two categories of aggregate demand--which provide the basis for the future long-term growth of living standards--have recovered rapidly from the low point in 1986 (see Figure I-8). Although this share is expected to continue to improve, it will do so at a slower rate and will remain below the usual level for mature expansion periods.

Real net exports are expected to grow more slowly than in 1988, largely because of the recent appreciation of the dollar. The rapid pace of improvement in the last three years has been driven primarily by the decline in the exchange rate from its high in 1985, but this decline stalled in 1988 and, contrary to expectations, the dollar appreciated rapidly in the first half of this year. Some of the appreciation was sparked by the increase in U.S. interest rates related to the tight monetary policy discussed above, but much of the appreciation appears to be unrelated to changes in interest rates. The dollar appreciated even as interest-rate differentials turned against the dollar (see Figure I-9). A number of developments may have accounted for the increased demand for dollars:

o Higher oil prices increased the share of worldwide wealth held by the Organization of Petroleum Exporting Countries (OPEC), which has a strong preference for dollar-denominated assets;

Figure I-8.
Real Net Exports and Investment



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTES: This figure does not incorporate the July 27, 1989, revisions in the National Income and Product Accounts data. The pattern of the real net export and investment share of net national product was not significantly changed by the revisions, however.

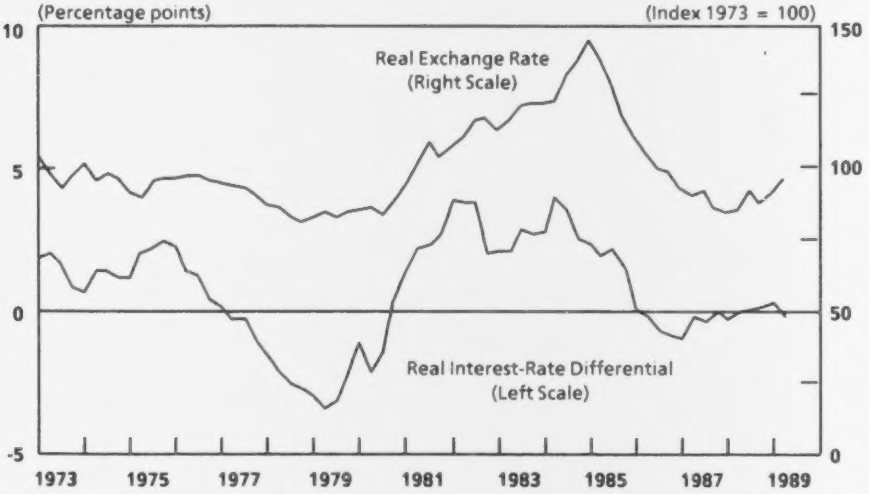
The asterisks indicate values forecast by CBO.

- Political uncertainties in Japan and West Germany, as well as civil strife in China, may have encouraged investment in dollar-denominated assets as a "safe haven"; and

- A belief that U. S. long-term interest rates were peaking may have encouraged foreign investors to accelerate their investment in U.S. securities.

At least some of the recent rise in the dollar is likely to be temporary, and CBO has assumed that the increase will not be passed on fully to lower import prices. In fact, by midyear, the dollar had already

Figure I-9.
The Exchange Rate and Interest-Rate Differential



SOURCES: Congressional Budget Office; Federal Reserve Board; International Monetary Fund.

NOTE: The real exchange rate is the level of U.S. consumer prices relative to consumer prices in 10 industrial countries, weighted by trade shares and adjusted by dollar exchange rates against the currencies of those countries. Its movements are dominated by movements in exchange rates. An increase in the real exchange rate corresponds to dollar appreciation.

The real interest-rate differential is the difference between U.S. real long-term interest rates and a gross domestic product-weighted average of foreign real long-term rates. Real interest rates are nominal long-term rates less expected inflation, estimated by a two-year centered moving average of actual and forecast inflation rates.

dropped about 7 percent from its peak in May, and the CBO forecast assumes it will depreciate further this year and next. Nevertheless, the forecast for the exchange rate leaves the dollar at the end of 1990 close to its level in late 1987. With more than three years of no net dollar decline, net exports are likely to increase at a slower rate in the next 18 months.

Foreign economic developments encouraged the recent growth in U.S. exports, and conditions abroad are likely to be only slightly less favorable through 1990. Economic activity of the United States' major industrial trading partners grew rapidly in 1988 and the first half of this year. That pace may slacken marginally over the forecast period. Fiscal policies in Japan and West Germany--the countries with the largest trade surpluses--are currently restrictive, however, and monetary policies worldwide are generally tightening because of concerns about inflation. On balance, CBO expects foreign economic developments to continue to support U.S. growth of exports through 1990.

Growth in real consumption, already down substantially from the rates of recent years, is likely to be limited as overall economic growth remains sluggish in the near future. Real disposable income will grow even more slowly than the rate forecast for the overall economy, largely because of the Social Security tax increase, the catastrophic coverage supplemental premium, and the phase-in of tax reform provisions. Interest income, which contributed substantially to the growth of disposable income in the first half of 1989, is expected to grow much more slowly as interest rates fall. Consequently, growth in income will provide little room for rapid growth in consumption, even though--as is usual in periods of slow economic growth--the personal saving rate is expected to fall. Consumer spending was already weak in the first half of 1989, reflecting widespread caution on the part of consumers.

Real business fixed investment will increase slightly faster than GNP this year, reflecting the generally high rate of capacity utilization, but in 1990 the growth rate is likely to slacken. Purchases of computers account for much of the rapid growth in purchases of equipment and are expected to continue, though at a slightly slower rate. Other kinds of equipment purchases are likely to slow in the remainder of this year and into 1990. For now, signs of such a slowing have not yet appeared: orders for nondefense capital goods remain strong, and manufacturers have a large backlog of orders for aircraft. In contrast, investment in business structures will remain weak because of particularly high vacancy rates for offices.

Real residential investment is likely to decline sharply this year, as a result of a generally weak economy and relatively high interest rates in the first half of the year. In 1990, however, this sector should recover somewhat. Investment in multifamily housing will also continue to be depressed by high rental vacancy rates. Falling interest rates during the next four or five quarters should set the stage for a mild rebound in single-family housing in 1990.

Real state and local spending on goods and services has weakened in recent quarters and is likely to remain weak. Large state and local operating deficits are expected to constrain the growth of total spending despite continued pressures to fix up a deteriorating stock of public infrastructure and provide and maintain facilities for an increasing school-age population.

Real federal government purchases of goods and services will not grow at all under the fiscal policy assumptions of the budget resolution. Excluding Commodity Credit Corporation (CCC) purchases, real purchases will fall by nearly $10 billion between 1988 and 1990. This drop, however, will be offset by the CCC, which will once again buy farm commodities after large sales in 1988 brought on by the drought.

The Current Consensus and Short-Term Recession Risk. The CBO forecast is quite similar to the July 1989 *Blue Chip* consensus forecast--slow growth, constant inflation above 4.5 percent, a gradual decline in short-term rates, and long-term rates remaining near their current levels.[2] Moreover, few of the *Blue Chip* forecasters disagree significantly with that consensus. Out of 52 forecasts for 1990 included in the survey, 30 expect real growth within one-half of a percentage point of the consensus; 35 expect inflation within the same range of the consensus; and 26 expect short-term interest rates within 50 basis points of the consensus.

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[2] *Blue Chip Economic Indicators*, a monthly survey of approximately 50 business and academic forecasts, is published by Eggert Economic Enterprises, Inc.

A few forecasters maintain, however, that the Federal Reserve's tight monetary policy of the past year will soon cause a recession, perhaps this year. Various statistical models have been used to examine directly the probability of recession. Although they indicate that the probability of a recession is greater now than it was six months ago, none has yet reached a threshold that would indicate a recession is likely.[3]

Medium-Term Projections

Because of the degree of uncertainty surrounding forecasts of conditions more than two years ahead, the medium-term projections for 1991 through 1994 do not attempt to capture possible short-term fluctuations in the economy. Instead, they are based on projected trends for growth in the labor force and in productivity, and they assume about average rates of unemployment. Since these historical averages include both recessions and expansion periods, the projections imply a probability of a recession that is consistent with the average experience of recessions in the past. They also imply that periods of very low unemployment, such as the late 1960s, that led to increases in inflation will occur with the frequency experienced in the past.

CBO projects that real GNP will grow at a rate of 2.5 percent from 1991 through 1994, with inflation in the Consumer Price Index for urban consumers (CPI-U) at about 4.6 percent and interest rates falling to just over 6 percent. The civilian unemployment rate is projected to remain close to current levels (see Tables I-3 and I-4). The share of profits in GNP rises slightly from the level forecast for the slow-growth period of 1990, while the declining share of federal net interest in GNP reduces nonwage personal income relative to GNP.

The implicit GNP deflator is projected to grow at a constant rate of 4.3 percent throughout this period, close to the average rate experienced since World War II. Inflation--measured either by the CPI-U or by the fixed-weighted price index for GNP--is somewhat higher. These projections of inflation are close to the rates forecast for 1990; as noted earlier, the economy does not slow enough in 1990 to reduce the rate of inflation significantly. Other considerations could lead to a much different projection of inflation. For example, if the Federal Reserve pursues a consistent policy of slowing money growth by a little each year, inflation would decline rather than stay close to its 1990 level. As noted in the next chapter, however, changes in the projection for inflation alone, without any accompanying changes in real growth or

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[3] For example, see James Stock and Mark Watson, "New Indexes of Coincident and Leading Economic Indicators," Harvard University, Kennedy School of Government Discussion Paper #178D, April 1989. Current estimates of the probability of a recession based on this model are issued monthly. The estimates based on June data indicate a 14 percent probability of recession by December 1989.

TABLE I-3. MEDIUM-TERM ECONOMIC PROJECTIONS FOR CALENDAR YEARS 1991 THROUGH 1994

	Actual	Forecast		Projected			
	1988	1989	1990	1991	1992	1993	1994
Nominal GNP (Billions of dollars)	4,864	5,223	5,549	5,923	6,329	6,763	7,226
Nominal GNP (Percentage change)	7.5	7.4	6.2	6.7	6.9	6.9	6.8
Real GNP (Percentage change)	3.9	2.8	1.7	2.3	2.5	2.5	2.5
Implicit GNP Deflator (Percentage change)	3.5	4.5	4.4	4.3	4.3	4.3	4.3
CPI-U (Percentage change)	4.1	5.2	4.7	4.6	4.6	4.6	4.6
Unemployment Rate (Percent)	5.5	5.3	5.5	5.6	5.6	5.6	5.6
Three-Month Treasury Bill Rate (Percent)	6.7	8.2	7.2	6.8	6.5	6.3	6.1
Ten-Year Government Note Rate (Percent)	8.8	8.6	8.2	8.1	7.9	7.7	7.6
Tax Bases (Percentage of GNP)							
Corporate profits	6.8	5.9	5.6	5.6	5.8	5.9	6.1
Other taxable income	20.9	21.8	21.5	21.3	21.1	20.8	20.6
Wage and salary disbursements	50.1	50.4	50.5	50.5	50.5	50.4	50.4
Total	77.7	78.1	77.7	77.5	77.4	77.2	77.1

SOURCE: Congressional Budget Office.

NOTES: GNP is the gross national product. CPI-U is the consumer price index for all urban consumers.

interest rates, would have offsetting effects on revenues and outlays, and hence would have little effect on the deficit projection.

The discrepancy between the growth of the GNP deflator and of the CPI-U largely reflects a projected increase in computers as a share of investment, exports, and imports. The deflator for computers has fallen in recent years, and this downward trend is likely to continue,

TABLE I-4. MEDIUM-TERM ECONOMIC PROJECTIONS FOR FISCAL YEARS 1991 THROUGH 1994

	Actual	Forecast		Projected			
	1988	1989	1990	1991	1992	1993	1994
Nominal GNP (Billions of dollars)	4,780	5,138	5,463	5,826	6,225	6,652	7,108
Nominal GNP (Percentage change)	7.7	7.5	6.3	6.7	6.8	6.9	6.9
Real GNP (Percentage change)	4.4	2.9	1.9	2.2	2.5	2.5	2.5
Implicit GNP Deflator (Percentage change)	3.2	4.5	4.4	4.3	4.3	4.3	4.3
CPI-U (Percentage change)	4.1	4.9	4.9	4.6	4.6	4.6	4.6
Unemployment Rate (Percent)	5.6	5.2	5.5	5.6	5.6	5.6	5.6
Three-Month Treasury Bill Rate (Percent)	6.2	8.2	7.3	6.9	6.6	6.3	6.1
Ten-Year Government Note Rate (Percent)	8.9	8.8	8.2	8.1	7.9	7.8	7.6
Tax Bases (Percentage of GNP)							
Corporate profits	6.7	6.2	5.6	5.6	5.8	5.9	6.0
Other taxable income	21.0	21.6	21.6	21.4	21.2	20.9	20.7
Wage and salary disbursements	50.0	50.4	50.5	50.5	50.5	50.4	50.4
Total	77.7	78.1	77.8	77.5	77.4	77.2	77.1

SOURCE: Congressional Budget Office.

NOTES: GNP is the gross national product. CPI-U is the consumer price index for all urban consumers.

slowing the rate of growth of the GNP deflator. In contrast, the CPI-U is not much affected by computer prices.

Interest rates are projected to decline from 1991 through 1994. The nominal short-term interest rate falls to 6.1 percent in 1994--a level consistent with the average of real short-term rates since exchange rates began to float in 1973. The long-term interest rate parallels this decline. Throughout the 1991-1994 period, the spread between the long- and short-term rates is similar to the average spread between those rates from 1973 to the present.

Most economists believe that the large federal deficit, coupled with low private saving, increases real interest rates. Because the rules used to project interest rates simply reflect historical averages, CBO has not forced the levels of interest rates in the projection period to be consistent with any given deficit path. If the federal deficit does not continue to fall after 1990, real interest rates could be somewhat higher than the historical average. If substantial progress is made toward reducing the federal deficit, however, real interest rates could be somewhat lower.

Comparison with Other Forecasts and the Winter CBO Forecast

The current CBO forecast is less optimistic than the Administration's midsession review forecast, but is quite similar to both the July *Blue Chip* consensus and Federal Reserve projections (see Table I-5).[4] The Administration forecasts higher real growth, lower consumer price inflation, and lower interest rates for 1989 and 1990. The *Blue Chip* consensus, however, indicates that growth in 1990 will be slightly weaker than the CBO forecast.

Compared with CBO's forecast last winter, the current forecast indicates slightly slower real growth and slightly higher prices in the near term, but long-term interest rates are significantly lower. The changes in the CBO economic forecast since last winter do not have a major effect on the deficit forecast for fiscal year 1990.

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[4] The projections shown for the Federal Reserve are the central tendencies of the projections of Federal Open Market Committee members and other Federal Reserve Board presidents.

TABLE I-5. UPDATED (SUMMER) CBO FORECAST FOR 1989 AND 1990, COMPARED WITH LAST WINTER'S FORECAST AND RECENT ADMINISTRATION AND *BLUE CHIP* FORECASTS

	Actual	Forecast	
	1988	1989	1990
Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GNP			
CBO Summer	7.2	6.8	6.4
Administration	7.2	7.1	6.8
Blue Chip	7.2	6.8	6.2
Federal Reserve Board[a]	7.2	6 to 7	5½ to 6½
CBO Winter	6.7	6.9	6.6
Real GNP			
CBO Summer	2.8	2.4	2.0
Administration	2.8	2.7	2.6
Blue Chip	2.8	2.2	1.7
Federal Reserve Board[a]	2.8	2 to 2½	1½ to 2
CBO Winter	2.6	2.9	2.2
Implicit GNP Deflator			
CBO Summer	4.3	4.2	4.4
Administration	4.3	4.2	4.1
Blue Chip	4.3	4.4	4.4
CBO Winter	4.0	3.9	4.4
CPI-U[b]			
CBO Summer	4.3	5.3	4.7
Administration	4.2	4.9	4.1
Blue Chip	4.3	5.3	4.6
Federal Reserve Board[a]	4.3	5 to 5½	4½ to 5
CBO Winter	4.4	5.0	4.8
Calendar-Year Averages (Percent)			
Civilian Unemployment Rate			
CBO Summer	5.5	5.3	5.5
Administration[d]	5.4	5.2	5.4
Blue Chip	5.5	5.3	5.7
CBO Winter	5.5	5.5	5.5
Three-Month Treasury Bill Rate			
CBO Summer	6.7	8.2	7.2
Administration	6.7	8.0	6.7
Blue Chip	6.7	8.2	7.4
CBO Winter	6.7	7.9	7.1
Ten-Year Government Note Rate			
CBO Summer	8.8	8.6	8.2
Administration	8.8	8.5	7.7
Blue Chip[c]	8.9	8.5	8.1
CBO Winter	8.9	9.3	9.0

SOURCES: Congressional Budget Office; Office of Management and Budget, *Mid-Session Review of the Budget*, July 18, 1989; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators*, July 10, 1989; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

a. Testimony by Alan Greenspan before the House Banking Committee (August 20, 1989).

b. Consumer price index for all urban consumers. Administration forecast is for the consumer price index for urban wage and clerical workers (CPI-W).

c. *Blue Chip* does not provide a 10-year note rate. The values here are based on the *Blue Chip* projection of the Aaa corporate bond rate adjusted by CBO to reflect the estimated spread between Aaa bonds and 10-year government notes.

d. Administration forecast is for the unemployment rate including the armed forces.

THE RISKS OF ANTI-INFLATION POLICIES

While many forecasters believe that the economy will avoid a recession during the next year and a half and that the rate of inflation will stabilize near 5 percent, they share a general concern that this inflation rate is unacceptably high. CBO and perhaps the majority of private forecasters believe that the only means of reducing the rate of inflation significantly might be to engineer a sharp economic slowdown. As the discussion below points out, others disagree with this pessimistic analysis of inflation and point to factors that could help reduce price pressures without a significant economic slowdown.

The Mainstream View of the Trade-off Between Unemployment and Inflation

The mainstream view implies that, if the economy is operating as close to its potential as CBO now estimates, inflation is likely to remain high unless the use of resources eases and unemployment is allowed to rise significantly. Marginal increases in the unemployment rate, such as those forecast by CBO, do not appear to be compatible with a marked decline in the underlying rate of inflation.

A common estimate of the trade-off between inflation and unemployment in the short run is that about two point-years of unemployment will bring about a reduction of underlying inflation from 5 percent to 4 percent.[5] Although during the oil price shocks of 1974 and 1979 this relationship seemed to break down, analysis indicates that it was merely overshadowed by the magnitude of the supply shocks and was still visible once prices were adjusted for the effect of these supply shocks.

Given the levels of unemployment and inflation forecast for 1990, the mainstream economic view is that unemployment would have to increase from 5.5 percent to 6.5 percent for two years (or 7.5 percent for one year) to reduce inflation from the 4.7 percent rate forecast by CBO to 3.7 percent. This view also implies that inflation would continue to decline as long as the unemployment rate remained above the 5.0 percent to 5.5 percent range that is generally considered to be the area in which additional inflationary pressures begin to develop in labor markets. Once inflation was reduced by a period of high unemployment, the unemployment rate could fall back to the 5.0 percent to 5.5 percent range without necessarily causing inflation to increase above the 3.7 percent rate.

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[5] A point-year of unemployment is the product of the percentage-point increase in the unemployment rate and the duration of this increase measured in years. Thus, for example, two point-years is either an unemployment rate that is one percentage point higher for two years, or two percentage points higher for one year. This relationship is described further in Alan S. Blinder, *Hard Heads, Soft Hearts* (Reading, Massachusetts: Addison-Wesley Publishing Company, 1987).

A More Optimistic View of the Outlook for Inflation

Some economists argue that inflation could fall without an economic slowdown if one or both of two things happen:

- Growth in productivity increases faster than the rates assumed by CBO and a number of other forecasters (growth in productivity helps reduce inflation by reducing unit labor costs); or

- Expectations of inflation decline among wage earners and others, perhaps because of a strengthened conviction that the Federal Reserve will not allow inflation to continue at current rates.

Possible Sources of a Strong Increase in Growth in Productivity. Productivity could grow faster than the majority of forecasters now assume. The January 1989 Economic Report of the President noted, for example, that a number of developments could quicken the growth in productivity to the relatively high rates that prevailed before the slowdown in productivity began in the early 1970s. These factors include the generally lower inflation rates and more stable patterns of economic growth that have prevailed during the past few years, a demographic shift to a more mature workforce, technological progress, and continued expansion in business investment. Other analysts point to competitive pressures from foreign countries, including newly industrializing countries as well as established economic powers.

Specialists are cautious when assessing the potential impact of these factors on growth in productivity. It is difficult to quantify their ultimate effects, to tell how much has already been felt, and to judge whether they will cause continuing increases in the growth of productivity or just one-time adjustments in its level. Partly for these reasons, many economists are still pessimistic about future growth in productivity.

The Role of Monetary Policy in Reducing Expectations of Inflation. Economists note that, regardless of developments in productivity, the rate of inflation could decline if wage earners and businesses come to expect lower rates of inflation and scale back their own demands for increases in wages and prices correspondingly. These analysts argue that expectations of future inflation may have fallen because of the tight monetary policy of the early 1980s and in recent years. This restraint has made the Federal Reserve's commitment to the goal of long-run price stability more convincing.

Many economists are skeptical, however, that monetary policy has gained sufficient credibility to raise the potential rate of growth. They argue that the level of long-term Treasury interest rates--now about 8 percent--implies that borrowers and lenders expect an inflation rate of at least 4½ percent, close to the average underlying rate for the 1983-1988 period. Moreover, they are still not convinced that the growth of the money supply will not accelerate rapidly if the current economic slowdown proves more severe than expected.

CHAPTER II

THE BUDGET OUTLOOK

After peaking at $221 billion in 1986, the federal deficit dropped sharply, finishing in the range of $150 billion to $155 billion in both 1987 and 1988. For much of this year, it looked as if the 1989 deficit would approximately match the past two years' results. But several shifts in the timing of outlays, along with a surge in payments resulting from the recently enacted savings and loan legislation, should push the 1989 deficit to about $161 billion.

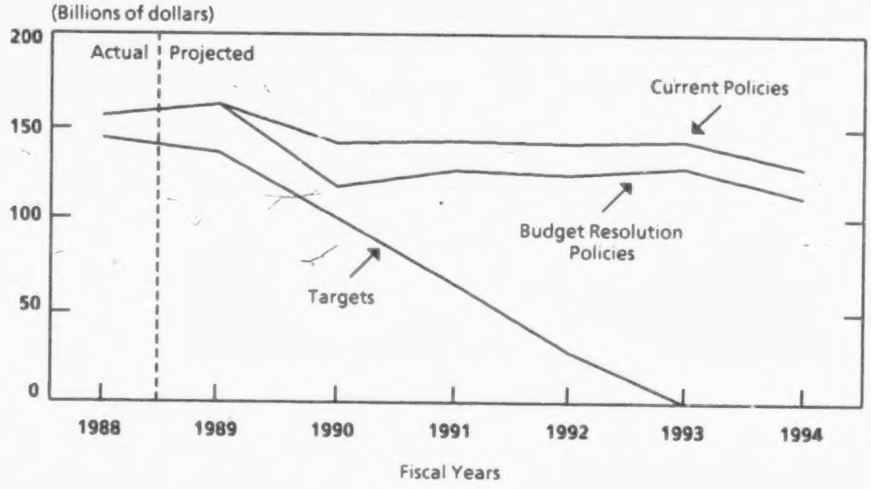
Under a continuation of policies in place in the midsummer of 1989, large deficits will persist for the next five years. The Congressional Budget Office's updated projections of future revenues and outlays under today's policies show a federal deficit that is nearly flat at just over $140 billion in 1990 through 1993. In 1994, the projected gap between spending and revenues drops to $128 billion.

This pattern of the projected deficit owes much to the newly enacted savings and loan bill. One of the most contentious issues in framing the bill was whether the expenditures on the savings and loan industry should be included in the budget or not. Ultimately, the Congress and the Administration compromised, including some spending in the budget but offsetting the remainder with funds borrowed by an off-budget, government-sponsored financing corporation rather than by the U.S. Treasury. Large budgetary outlays will result in 1989, and fluctuating amounts in 1990 and beyond. At the same time, approximately $37 billion to be spent on rescuing insolvent financial institutions in 1989 through 1991 is not reflected in the budget totals at all.

The projected deficits far exceed the targets of the Balanced Budget Act, commonly known as Gramm-Rudman-Hollings (see Figure II-1). In 1990, the current focus of policymakers' attention, the baseline deficit exceeds the $100 billion target by more than $41 billion. In 1993, according to the act's requirements, the budget is to be balanced; instead, the projected deficit under current policies is $143 billion.

The baseline estimates do not reflect policy initiatives that the Congress is currently working on as fiscal year 1990 approaches. These initiatives were hammered out in a summit agreement between the Congress and the Administration in April, and embodied in a Congressional budget resolution passed in May. The savings called for in this resolution have not yet been enacted, and therefore are not part of the baseline projections. If the policymakers carry out the summit agreement in full, they can achieve sustained deficit reductions of about $15 billion in 1990 and thereafter. Other actions, such as selling government assets, would result in one-time savings of about $9 billion in 1990 but have little longer-run impact. According to CBO's estimates, these actions would bring the deficit within striking distance of the targets for 1990 (see Figure II-1). Because the targets decline each year, however, much more would still need to be accomplished in fiscal year 1991 and beyond.

Figure II-1.
Projected Deficits Compared With Balanced Budget Act Targets



SOURCE: Congressional Budget Office.

NOTE: The Balanced Budget Act sets targets only through fiscal year 1993.

This chapter first summarizes the budget outlook for the next five years. It presents CBO's projections of revenues, spending, and deficits through 1994. The budget projections are consistent with the two-year economic forecast and the longer-run economic assumptions described in Chapter I. They convey much the same message as CBO's last published projections, released in February 1989. Factors other than the savings and loan legislation that affect the deficit--economic, technical, and legislative--have, on balance, not changed the outlook greatly.

The chapter then describes the effect that implementing the budget summit agreement would have on the spending and revenue outlook. It also tells how in coming months the Balanced Budget Act will influence decisions on the 1990 budget. That act calls for automatic, across-the-board cutbacks in spending if certain deficit targets are not projected to be met; the discussion explains how large these reductions would be if they were based on CBO's estimates. However, the actual triggering and size of any such cutbacks hinge on more optimistic Administration (not CBO) estimates. A final section briefly analyzes the sensitivity of the budget projections to the underlying economic assumptions.

THE BUDGET OUTLOOK UNDER CURRENT POLICIES

Under current policies, the federal deficit is projected to decline from its current level but remain high. By 1994, the deficit is still at $128 billion, down only one-fifth from its current level.

With sustained, moderate economic growth over the next six years, the projected deficit shrinks as a share of gross national product (GNP). By 1994, it stands at about 1.8 percent of GNP, down from 3.1 percent at present (see Table II-1). This shrinkage stems from a decline of more than a percentage point, under baseline assumptions, in federal outlays as a share of GNP, led by relative declines in spending for defense and nondefense discretionary spending, net interest, and deposit insurance. (As described below, the baseline provides full current-law increases in major benefit programs but no real growth in defense and nondefense discretionary programs.) After climbing to 19.6 percent of GNP in 1990, revenues grow slightly less rapidly than the economy, returning by 1993 and 1994 to 19.3 percent of GNP--the same share they had in 1989.

Even while declining as a share of GNP, the deficit stays high by recent standards. Depicting the budget totals as shares of GNP is especially important when making comparisons across years or decades. At slightly under 2 percent of GNP by 1994, the deficit roughly matches typical levels of the 1970s, a period when the economy was operating with considerable slack, and greatly exceeds the experience of the 1960s (see Figure II-2).

Only by the standards of the early and mid-1980s has the deficit been curbed. The deficit peaked at more than 6 percent of GNP in 1983, and remained well over 5 percent long after recession had given way to recovery; today, it stands at about 3 percent. One fear of many economists and policymakers has been laid to rest at least temporarily: the debt held by the public is no longer growing faster than GNP, nor is it threatening to send interest costs spiraling out of control. In the projections, the debt-to-GNP ratio subsides from 42.7 percent in 1989 to 40.7 percent in 1994 (see Table II-1). But the large federal debt still

TABLE II-1. CBO BASELINE PROJECTIONS OF REVENUES, OUTLAYS, DEFICIT, AND DEBT (By fiscal year)

	Actual	Base	Projections				
	1988	1989	1990	1991	1992	1993	1994
			In Billions of Dollars				
Revenues	909	991	1,071	1,138	1,207	1,287	1,372
Outlays	1,064	1,152	1,212	1,282	1,348	1,430	1,500
Deficit	155	161	141	144	141	143	128
Deficit Targets	144	136	100	64	28	0	a
Debt Held by the Public	2,050	2,196	2,338	2,481	2,621	2,762	2,890
			As a Percentage of Gross National Product				
Revenues	19.0	19.3	19.6	19.5	19.4	19.3	19.3
Outlays	22.3	22.4	22.2	22.0	21.7	21.5	21.1
Deficit	3.2	3.1	2.6	2.5	2.3	2.1	1.8
Debt Held by the Public	42.9	42.7	42.8	42.6	42.1	41.5	40.7
Reference: GNP (In billions of dollars)	4,780	5,138	5,463	5,826	6,225	6,652	7,108

SOURCE: Congressional Budget Office.

a. The Balanced Budget Act set deficit targets only through fiscal year 1993.

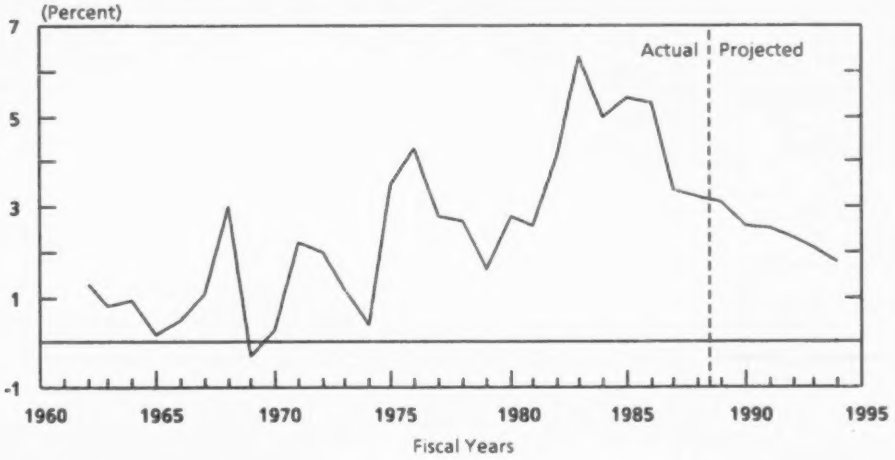
remains as a legacy of the 1980s, and interest costs claim roughly one out of every six tax dollars collected by the government, compared with about one out of every twelve dollars during the 1970s.

The Baseline Concept

CBO's baseline projects the course of the federal budget if current tax laws and spending policies remain unchanged. The baseline is not a prediction of future budget outcomes, because many changes in policy will certainly be adopted. But a baseline is useful for illustrating the dynamics of federal government revenues and spending, to show the consequences of unchanged policies, and to provide a benchmark against which policymakers can compare the effects of tax and spending proposals.

In the mid-1980s, a proliferation of baselines generated considerable confusion. Without firm rules governing the development of a baseline, proposed savings or additions could be made to look larger

Figure II-2.
Federal Deficit as a Share of Gross National Product



SOURCE: Congressional Budget Office.

or smaller simply by picking and choosing different baselines for comparison. In the Balanced Budget Act, the Congress set certain rules for baseline projections. These stipulations are especially important when, as for fiscal year 1990, the laws affecting the budget are not fully in place. In general, the new rules correspond to procedures long followed by CBO. While the rules apply only to estimates for the upcoming fiscal year that are required by the Balanced Budget Act, for simplicity CBO follows the same assumptions for its five-year baseline projections as well.

In projecting revenues, entitlement programs (such as Social Security and other major benefits), and mandatory spending (such as deposit insurance), the baseline assumes the continuation of laws now on the books. Scheduled increases or decreases, phaseouts, and most expirations are fully incorporated. In keeping with the Balanced Budget Act specifications, however, excise taxes that are dedicated to trust funds are assumed to continue after their currently scheduled expirations--an assumption that affects the five-year projections for the Highway, Airport and Airways, and three smaller trust funds.

Unlike entitlement spending, many government programs must be funded annually through appropriation acts. None of the 13 regular appropriation bills for fiscal year 1990 has yet been enacted. In this situation, the act states that the baseline should simply adjust the current 1989 appropriation for inflation. The baseline follows this rule for defense and nondefense discretionary programs, which make up approximately one-fourth and one-sixth of federal outlays, respectively. This assumption keeps budget authority--that is, an agency's authority to obligate money--constant in real terms. Merely increasing the appropriation for inflation does not provide room for many projects that proponents might view as desirable, necessary, or even unavoidable. Projects such as building a space station, cleaning up the government's nuclear weapons plants, or devoting more resources to the drug war would require larger increases or a diversion of funds from other activities. In modifying CBO's baseline for use in Congressional budget deliberations, in fact, the Budget Committees elected to assume additional funding for several activities--notably for renewing subsidized housing contracts and conducting the 1990 census--that will face unusually heavy demands in the next few years.

Two categories of spending remain. Projections of offsetting receipts (such as Medicare premiums or receipts from oil leases) represent CBO's best estimates given existing laws and policies. Projections of net interest costs are consistent with the assumed interest rates and deficits.

Changes in the Baseline Estimates

Last January, CBO described in detail the budget outlook in its report, *The Economic and Budget Outlook: Fiscal Years 1990-1994*. The projections were modified slightly in February, based on information that became available with the release of the President's budget. The single biggest change in the estimates since that time reflects agreement on legislation to address the problems of the nation's savings and loan industry. Little other budget-related legislation has been enacted. Other revisions--resulting from changes in the economic outlook and from technical factors--have on balance reduced the deficit slightly, but erratically. Because the baseline projections were discussed in detail last winter, the following discussion focuses on changes in these projections. These changes are summarized in Table II-2.

Changes in the Baseline Spending Projections.

Changes in the baseline spending estimates since February can be attributed to three causes--enacted legislation, changes in the economic outlook, and technical factors.

Apart from the savings and loan legislation, which is discussed in greater detail below, new legislation has had only small effects on the spending projections. An emergency supplemental appropriation enacted early this summer increases outlays for discretionary programs by slightly less than $1 billion in 1989 and subsequent years. Veterans' medical care received the largest infusion of cash under the supplemental bill, and other areas receiving extra funds included migration and refugee assistance, antidrug activities, and certain housing programs. Another measure providing additional relief for farmers hit by adverse weather conditions will add almost $1 billion to outlays in 1990 but has negligible effects in other years.

TABLE II-2. CHANGES IN CBO BASELINE ESTIMATES SINCE FEBRUARY (By fiscal year, in billions of dollars)

	1989	1990	1991	1992	1993	1994
Outlays						
February 1989 Estimate	1,142	1,215	1,287	1,348	1,416	1,489
Enacted Legislation						
Savings and loan bill[a]	14	4	-2	b	11	1
Other[a]	1	2	1	1	1	2
Subtotal	15	6	b	1	13	3
Economic Reestimates						
Interest rates	1	-2	-5	-5	-4	-1
Changes in benefit programs	-1	1	1	1	2	4
Discretionary inflation	0	b	1	1	2	3
Debt service	b	-1	-1	-2	-3	-4
Subtotal	b	-2	-4	-4	-2	1
Technical Reestimates						
Defense pay dates, advance farm deficiency payments, and Food Stamp write-off	4	-4	0	0	0	3
CCC target price assumption	0	0	b	2	3	4
Medicare, Social Security, and Civil Service Retirement	-2	-2	-1	b	-1	-1
Other	-6	-1	1	1	1	2
Subtotal	-4	-7	b	2	3	7
Total	11	-2	-5	b	14	11
Current Estimate	1,152	1,212	1,282	1,348	1,430	1,500
Revenues						
February 1989 Estimate	983	1,069	1,140	1,209	1,280	1,359
Enacted Legislation	b	1	b	b	b	b
Economic Reestimates	3	6	2	6	16	25
Technical Reestimates	5	-4	-4	-7	-9	-12
Total	8	3	-2	-2	7	13
Current Estimate	991	1,071	1,138	1,207	1,287	1,372
Deficit						
February 1989 Estimate	159	146	146	140	135	130
Enacted Legislation	15	6	-1	1	13	3
Economic Reestimates	-3	-7	-6	-10	-17	-24
Technical Reestimates	-9	-3	4	10	12	19
Total	2	-5	-2	1	7	-2
Current Estimate	161	141	144	141	143	128

SOURCE: Congressional Budget Office.

NOTE: CCC = Commodity Credit Corporation.

a. Includes additional Treasury debt service costs.

b. Less than $500 million.

Revised economic assumptions. Spending changes attributable to the new economic projections reduce outlays slightly through 1993 on balance, but boost them in 1994--reflecting the opposing influences of higher inflation and somewhat lower interest rates. Interest rates are well down from peaks attained this spring, when the 91-day Treasury bill rate briefly exceeded 9 percent. While this spike in interest rates was not anticipated by CBO, it was confined to short-term maturities and proved temporary. Medium- and long-term rates are below levels previously forecast. With the Treasury continuing to borrow the bulk of its new money in medium and long maturities, reductions in interest costs, ranging from $2 billion in 1990 to $5 billion in 1992, are expected to result.

On the other hand, higher inflation drives up spending for most other programs. Outlays for benefit programs are up, principally because of higher cost-of-living adjustments (COLAs) and other automatic inflation adjustments. CBO now estimates that the upcoming COLA for Social Security and other large retirement programs, payable in January 1990, will be 5.2 percent. (The actual increase will be known in late October.) The projections also reflect changes in benefit programs that are sensitive to particular measures of inflation (for example, food costs or medical care). With little change in the outlook for unemployment rates, outlays for unemployment compensation and other sensitive programs change only modestly. Because of these revisions in economic assumptions, total spending on benefit programs is expected to exceed earlier projections by about $1 billion in 1990 and $4 billion in 1994. As noted earlier, the baseline assumes that future appropriations for defense and nondefense discretionary programs are increased to keep pace with inflation, and the new inflation assumptions boost projected baseline spending for these activities by a few hundred million dollars in 1990 and about $3 billion in 1994 (see Table II-2).

Timing shifts and other technical changes. Some of the most significant technical changes in the estimates reflect timing shifts and other transitory factors. Two actions--accelerating the first military paycheck in fiscal year 1990 from October 1 to September 29, and advancing some farm price support payments from 1990 into 1989--swell 1989 outlays by nearly $4 billion but reduce 1990 spending commensurately. The government also plans to take a one-time credit for over 10 years' worth of issued but unredeemed food stamps in 1990, reducing recorded outlays by about $500 million; this bookkeeping entry, however, has no effect on the government's borrowing requirements. Fiscal year 1994 will see a repeat of the 1989 situation regarding military paychecks, as the normal pay date falls on a weekend; CBO assumes that the Secretary of Defense at that time will again use his authority to pay military personnel at the end of September (see Table II-2).

As the Congress worked on its budget resolution earlier this year, questions arose over how the baseline should treat expiring provisions of farm price support programs. The law currently governing such programs expires after the 1990 crop year. The Balanced Budget Act states that the baseline for the upcoming year should assume continuation of the programs at current rates; it does not, however, apply to longer-term projections. In the past, CBO has assumed that target prices, which help determine payments to farmers, would gradually decline after the 1990 crop year, continuing the pattern set by the 1985 Food Security Act for 1985 through 1990. But in developing its own baseline for the budget resolution, the Congress chose instead to assume constant target prices after 1990. Because the Congress prefers to use this assumption, and because the Balanced Budget Act can be interpreted to support this approach, CBO has adopted it for the new projections. This assumption has no effect on outlays in 1990, but adds growing amounts--more than $3.5 billion in 1994--thereafter.

Spending for Medicare exhibits a mixed pattern, as significantly lower spending for Supplementary Medical Insurance (Medicare Part B) is increasingly offset by greater Hospital Insurance (Medicare Part A) and, especially, prescription drug insurance outlays (part of last year's expansions in catastrophic health care coverage). Two large retirement programs--Social Security and Civil Service Retirement--are experiencing slightly lower benefit payments than expected, contributing about one-half billion dollars each to lower outlays. Other technical changes are mixed, contributing on balance $1 billion to $2 billion a year to the revisions.

The savings and loan bill. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (Public Law 101-73) is a complex measure affecting federal government taxes, premiums, spending, borrowing, and regulation. While the bill strengthens the government's system for insuring commercial banks, its primary focus lies in addressing the huge liabilities forced on the government by failed and insolvent savings and loan institutions.

In last February's baseline, CBO projected large outlays by the Federal Savings and Loan Insurance Corporation (FSLIC) through 1994. These outlays, however, were constrained by the financial and human resources available to the FSLIC and by its eventual capacity to repay borrowed cash. There was no pretense that the outlays were adequate to deal with the scope of the problem.

In addressing the savings and loan crisis, the government had to deal with three separate challenges: fulfilling its commitments regarding previously insolvent institutions, resolving currently and prospectively insolvent institutions, and setting up funds to provide future insurance. The legislation establishes a new Resolution Trust Corporation (RTC) to merge or close currently insolvent insured thrifts. The RTC is to spend a total of $50 billion on this task. Only $19 billion, however, will appear in the budget, while $1 billion is provided by the Federal Home Loan Banks and the remaining $30 billion is to be borrowed by the Resolution Funding Corporation (REFCORP), created as an off-budget, government-sponsored enterprise. On top of this $50 billion, the RTC is authorized to issue notes (approximately $13 billion in 1990 and 1991, in CBO's estimate) to help resolve cases pending receipt of income from liquidations. The $50 billion in resources available to the RTC are sufficient, in the Administration's estimate, to cover the government's liabilities for currently insolvent thrifts with $10 billion left over to help defray interest costs; many observers, including CBO, doubt that this level of resources is enough.

A separate FSLIC Resolution Fund is established to oversee previous commitments. The assets and liabilities of FSLIC are transferred to this fund, and FSLIC itself is dissolved. Surviving savings and loan institutions are to meet tougher capital standards and restrictions on investments; future deposit insurance will be under a new Savings Association Insurance Fund (SAIF). By setting both annual and cumulative caps on SAIF's obligations, the legislation restricts its ability to deal with future insolvencies. Both SAIF and the new Bank Insurance Fund (BIF), which will insure commercial banks, will be managed by the Federal Deposit Insurance Corporation (FDIC).

Budgetary effects of the legislation are shown in Table II-3. Changes in thrift-related outlays under the bill reflect spending for assistance, interest costs, and administrative costs. Partly offsetting these added outlays are liquidation proceeds and assessments collected from the industry and the Federal Home Loan Banks. As Table II-3 implies, the official budget totals understate spending in 1989 through 1991, because the FSLIC's and RTC's resources are supplemented by about $37 billion borrowed on their behalf by REFCORP and by the Financing Corporation (FICO), a similar off-budget enterprise created by legislation passed in 1987.

Borrowing by REFCORP and FICO is the key ingredient that permits large savings and loan-related outlays to be effectively excluded from the budget. Normally, the U.S. Treasury conducts any borrowing necessary to finance government deficits. Treasury borrowing finances the deficit; it does not reduce the deficit. But unlike the U.S. Treasury, FICO and REFCORP are technically government-sponsored enterprises. Borrowing by FICO and REFCORP circumvents the usual budgetary treatment. The funds they raise and turn over to the government may be counted as government collections, and these collections, in turn, offset the associated outlays for resolving insolvent thrifts.

Considerable uncertainty surrounds the near-term effect of the legislation on spending. In making $20 billion available immediately, mostly through ordinary Treasury borrowing, the Administration and the Congress anticipated that these funds would be spent wholly in fiscal year 1989. CBO believes, however, that only $15 billion of this amount will be spent this year and $5 billion during the first few months of fiscal year 1990. Because this $20 billion will appear in the budget totals, CBO's assumption about the timing of outlays affects both the 1989 and 1990 deficits.

Table II-3 shows other budgetary effects of the new law attributable to its commercial bank provisions and tax provisions. The legislation imposes higher deposit insurance premiums on commercial banks, and repeals certain tax preferences currently available to acquirers of troubled financial institutions.

TABLE II-3 EFFECTS OF THE SAVINGS AND LOAN LEGISLATION
(By fiscal year, in billions of dollars)

	1989	1990	1991	1992	1993	1994	Total 1989-1994
Previous CBO Baseline for Deposit Insurance							
Federal Savings and Loan Insurance Corporation (FSLIC)	9.2	10.4	11.6	6.8	6.5	5.5	49.9
Federal Deposit Insurance Corporation (FDIC)	3.3	1.4	1.4	1.4	1.3	1.3	10.1
Budgetary Impact of Legislation							
Savings and Loan Provisions	13.9	3.4	-1.9	-0.6	10.0	-0.8	24.0
Commercial Bank Provisions	0.2	-0.5	-1.4	-1.7	-1.8	-2.0	-7.2
Tax Provisions[a]	-0.5	-0.6	-0.3	b	0.1	0.1	-1.2
Subtotal	13.6	2.3	-3.6	-2.3	8.3	-2.7	15.6
Additional Treasury Debt Service Costs[c]	0.1	1.4	1.8	2.1	3.0	4.0	12.4
Total	13.7	3.7	-1.9	-0.2	11.3	1.3	28.0
Resulting Baseline							
FSLIC and Successors[d]	23.1	13.8	9.7	6.2	16.5	4.7	73.9
FDIC and Successors[e]	3.5	0.9	b	-0.3	-0.5	-0.7	2.9
Additional Spending Financed by Off-Budget Borrowing							
Financing Corporation (FICO) Borrowing	4.4	2.7	0	0	0	0	7.1
Resolution Funding Corporation (REFCORP) Borrowing	0	10.0	20.0	0	0	0	30.0

SOURCE: Congressional Budget Office.

a. Tax increases are shown with a negative sign because they reduce the deficit.

b. Less than $50 million.

c. Includes interest on $18.8 billion provided to RTC in 1989 and 1990 plus interest on all other Treasury financing required by the legislation.

d. Includes outlays of the new Resolution Trust Corporation (RTC), the FSLIC Resolution Fund, and the Savings Association Insurance Fund (SAIF).

e. Includes outlays of the new Bank Insurance Fund (BIF).

Clearly, in six months of work on the savings and loan bill, one of the most protracted disputes involved its budgetary treatment. The debate centered on one particular aspect of the legislation, the $50 billion earmarked for resolving currently insolvent thrift institutions. The Administration urged that REFCORP borrow the entire $50 billion over three years, excluding the entire amount from budget totals. Doing otherwise, the Administration and its allies argued, would balloon the deficit and create a precedent for relaxing Balanced Budget Act targets. Critics argued that REFCORP was not private in any meaningful sense, because it had the power to compel certain payments from the industry and because it existed solely to raise funds and hand them over to the Treasury. Furthermore, since no other agency or government-sponsored enterprise can borrow as cheaply as the U.S. Treasury, an off-budget solution would add to the interest costs borne by taxpayers. Finally, off-budget financing approaches themselves could set a bad precedent.

The legislation ultimately incorporated a partially on-budget, partially off-budget approach. The approach chosen raises the interest costs that will be borne by taxpayers (by $2 billion to $3 billion over the next 30 years, in CBO's estimate) and diminishes the usefulness of the budget as a comprehensive measure of the government's spending and borrowing. Most economists agree, however, that in making good on its commitments to depositors in insured institutions, the government does not stimulate the economy as it would by spending money on defense or transfer programs (see Box I-1 on page 10).

Changes in the Revenue Projections. On the basis of strong monthly tax collections to date, CBO now projects fiscal year 1989 revenues to be $991 billion, $8 billion above the February estimate. Revisions in all other years except one are smaller, however, reflecting a mix of economic and technical changes that mostly offset one another (see Table II-2). For 1990, CBO's current projection of federal revenues is only $3 billion above last February's expectation. Revenues in 1991 and 1992 are now estimated to be slightly smaller than previously expected; in the final two years of the projection, however, revenues exceed last winter's projections by $7 billion in 1993 and $13 billion in 1994.

The $8 billion increase in 1989 revenues reflects the unanticipated strength of tax payments in the first 10 months of the fiscal year. This spring's tax filing season revealed strong final settlements of 1988 individual income taxes. Countering these, personal taxes withheld from payrolls have fallen shy of earlier projections. Corporate income taxes have been slightly stronger than the February estimates, as have estate and gift taxes. The net effect of these several changes on total revenues in future years is small.

For the 1990-1994 period, total revenues are estimated to be quite close to CBO's February estimates. Apart from the savings and loan bill, no legislation affecting federal revenues has been enacted this year. CBO's economic assumptions, on balance, raise revenues each year; technical changes reduce revenues each year.

CBO's new economic forecast--described in detail in Chapter I--envisions larger nominal GNP each year than did last winter's forecast. Reflecting higher GNP and a larger fraction of national income paid to labor, wages and salaries have been increased by about $20 billion per year for the first three years of the projection period and by about $50 billion by 1994. Personal nonwage income is also higher each year than was expected in February. Income and payroll taxes, taken together, rise as a result of new economic assumptions alone by $12 billion in 1990 and $22 billion in 1994. Lower corporate income taxes, following the revised path of corporate profits, offset half of this increase in 1990. Profits remain below last February's projections for most of the period, though by diminishing amounts; by 1994, profits are slightly above the winter projection. Revisions in corporate profit taxes closely follow these changes in profits. All other effects of the economic assumptions on revenues are small.

Technical changes reduce revenues by $4 billion in 1990 and 1991, by $7 billion in 1992, and by $12 billion in 1994. Two major revisions affect revenues throughout the projection period. First, an unanticipated surge of activity during 1989 in employee stock ownership plans (ESOPs) has led to downward revisions in corporate income taxes. Most ESOPs purchase corporate stock with funds borrowed from financial institutions, which may in turn exclude half of the interest received when computing their taxable income. Additionally, corporations receive a deduction for dividends paid to ESOPs. Because of the sudden, sharp increase in ESOP financing this spring and the projected continuation of this trend, a significant amount of otherwise taxable interest and dividends will be shielded from tax. This reduces projected corporate revenues by $2 billion to $3 billion more per year than was anticipated in February.

Second, the Social Security wage base has been revised downward based on new information received from the Social Security Administration. Recent data on the wages of workers covered by Social Security suggest that a greater portion of earnings than previously thought lies above the maximum subject to tax. This reduces payroll taxes by $4 billion to $6 billion each year from 1990 through 1994.

Two other factors affect individual income tax revenues in different years. CBO has revised its expectations about how quickly payments of the surtax for catastrophic health insurance will come into the Treasury. Acceleration of these payments raises personal income taxes by $1 billion in 1990 and again in 1991. Effects in other years are less than one-half billion dollars. New information about employer-sponsored, tax-deferred savings plans--401(k) plans--shows more extensive participation and larger contributions per participant than were estimated in February. Consequent revenue reductions in the early years of the projection period are small, but these grow to $4 billion by 1994. Other technical revisions are small.

Spending and Revenues by Category

Updated projections of revenues by source, and outlays by category, are shown in Table II-4. Total revenues still claim the same share of GNP in fiscal year 1990--19.6 percent--as expected in February. This share is up from 19.3 percent in 1989 largely because of previously legislated tax increases, the effects of which are fully felt for the first time in 1990. These include increases in the Social Security tax rates that were mandated in the 1983 Social Security amendments; the first full year of collections of the surtax for catastrophic health insurance; and the effects of provisions broadening the income tax base that were enacted in the 1986 Tax Reform Act. After 1990, the tax share of GNP slowly drifts downward, reaching 19.3 percent in 1993 and 1994, as most tax sources other than the individual income tax grow less rapidly than GNP. Unemployment insurance taxes drop as a share of GNP, a pattern stemming from stable, low rates of unemployment and healthy trust fund balances.

TABLE II-4. CBO BASELINE BUDGET PROJECTIONS (By fiscal year)

	Actual 1988	1989	1990	1991	1992	1993	1994
In Billions of Dollars							
Revenues							
Individual income	401	442	491	527	563	604	645
Corporate income	95	105	107	112	117	125	135
Social insurance	334	362	389	414	440	468	499
Other	79	83	85	85	86	89	93
Total	909	991	1,071	1,138	1,207	1,287	1,372
Outlays							
National defense	290	301	301	314	326	339	356
Nondefense discretionary spending	174	193	204	212	219	228	237
Entitlements and other mandatory spending	503	553	587	630	675	732	772
Net interest	152	169	180	189	195	203	209
Offsetting receipts	-55	-64	-60	-63	-67	-71	-75
Total	1,064	1,152	1,212	1,282	1,348	1,430	1,500
Deficit	155	161	141	144	141	143	128
As a Percentage of Gross National Product							
Revenues							
Individual income	8.4	8.6	9.0	9.0	9.1	9.1	9.1
Corporate income	2.0	2.0	2.0	1.9	1.9	1.9	1.9
Social insurance	7.0	7.1	7.1	7.1	7.1	7.0	7.0
Other	1.7	1.6	1.6	1.5	1.4	1.3	1.3
Total	19.0	19.3	19.6	19.5	19.4	19.3	19.3
Outlays							
National defense	6.1	5.9	5.5	5.4	5.2	5.1	5.0
Nondefense discretionary spending	3.6	3.8	3.7	3.6	3.5	3.4	3.3
Entitlements and other mandatory spending	10.5	10.8	10.7	10.8	10.8	11.0	10.9
Net interest	3.2	3.3	3.3	3.2	3.1	3.0	2.9
Offsetting receipts	-1.1	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1
Total	22.3	22.4	22.2	22.0	21.7	21.5	21.1
Deficit	3.2	3.1	2.6	2.5	2.3	2.1	1.8

SOURCE: Congressional Budget Office.

NOTE: Totals include Social Security, which is off-budget.

As a share of GNP, outlays drop gradually from 22.4 percent in 1989 to 21.1 percent by 1994. Entitlements and other mandatory spending remain by far the largest category of outlays, fluctuating just under 11 percent of GNP for most of the projection period. Gradual, though uneven, declines in deposit insurance spending, which is included in this category, are offset elsewhere, particularly in the fast-growing Medicare program. Several other categories of spending decline as a share of GNP: defense, nondefense discretionary spending, and net interest. In all three cases, though, the decline is a product of baseline assumptions. The first two are assumed to increase only in tandem with inflation, implying no real growth and affording room for real spending increases only at the expense of competing programs. The interest projections reflect gradual declines in interest rates from today's levels. Alternative assumptions about interest rates, or about government deficits, would alter the projections--as shown in the final section of this chapter.

The projections reflect certain changes in the classification of spending that were adopted by the budget summit negotiators in the spring of 1989. Despite the seemingly clear-cut approach for classifying nondefense programs--divided into entitlements and mandatory spending, discretionary spending, and offsetting receipts--some activities are not easily categorized. Such distinctions are important to policymakers, especially as they affect the responsibility of Congressional committees for outlay savings or overruns. As discussed in Appendix A, the summit negotiators agreed to reclassify more than two dozen nondefense programs. On balance, the shifts slightly increase spending ascribed to entitlement and mandatory programs and reduce the amounts considered discretionary. CBO's new projections incorporate these changes, and consistent historical data are provided in Appendix A.

Trust Funds in the Projections

In recent years, increased attention has focused on the contribution of trust funds to the budget totals. For more than 20 years, since the report of the President's Commission on Budget Concepts in 1967, the government has emphasized the total budget, a comprehensive measure that counts revenues from all sources and spending of all types. Total spending and total revenues, it is reasoned, best show the importance of the government in the overall economy and determine the government's borrowing needs--the measure most watched by financial market participants and economists. The six-month debate over the savings and loan package showed that these observers keenly follow the total amounts that must be spent and borrowed by the government, regardless of their budgetary treatment.

Before adoption of the unified, or comprehensive, budget, the federal government's books were segregated into an administrative budget and a trust funds budget. Many proposals for separate accounting of budgetary totals continue to presume a meaningful distinction between trust funds and other federal government programs.

Social Security. The current interest in the contribution of trust funds to the budget stems in large part from the amendments adopted in 1983 to strengthen the Social Security system. As a result of these amendments, the program, viewed in isolation, was in significant surplus by mid-decade. By 1985, policymakers had become keenly aware of these surpluses. The original Balanced Budget Act, enacted in 1985, adopted the total deficit as the test of the government's compliance with deficit targets, but specified that Social Security totals be presented separately as off-budget. (The 1983 Social Security amendments also required showing Medicare's Hospital Insurance program as off-budget, but delayed this requirement until the 1993 budget is submitted.)

Table II-5 separates baseline revenues and outlays into their on-budget and off-budget (Social Security) parts. The Social Security surplus grows from an estimated $54 billion in 1989 to about $113 billion in 1994. The on-budget deficit--that is, the deficit in the remainder of the budget excluding Social Security--grows unevenly from $215 billion in 1989 to $241 billion in 1994.

Segregating Social Security or any other trust fund not only promotes a fragmented view of the federal government's economic role, but also obscures the program's links with other parts of the government. The Social Security surplus reflects many payments from the general fund to the Social Security trust funds. The chief example is the payment of interest to Social Security, slated to quadruple from $11 billion in 1989 to $42 billion in 1994 under CBO's latest projections. These payments contribute equally to the on-budget deficit and the off-budget surplus; they have no effect on the total deficit. If the transfer of interest from the general fund to Social Security were excluded, the non-Social Security deficit would be essentially flat at about $200 billion a year over the 1989-1994 period.

Other Trust Funds. The two Social Security trust funds--Old Age and Survivors Insurance and Disability Insurance--are together the largest government trust fund in terms of their annual spending and revenue flows. But surpluses can be calculated for other government trust funds as well. Table II-6 presents the surpluses, as conventionally measured, for the major federal government trust funds. In the aggregate, this official trust fund surplus grows from $121 billion in 1989 to $175 billion in 1994.

TABLE II-5. CBO BASELINE PROJECTIONS FOR ON-BUDGET AND OFF-BUDGET REVENUES AND OUTLAYS
(By fiscal year, in billions of dollars)

	Actual 1988	Base 1989	Projections 1990	1991	1992	1993	1994
Off-Budget (Social Security)							
Revenues	241	265	288	310	331	354	379
Outlays	203	211	223	235	245	255	265
Surplus	39	54	65	75	86	99	113
On-Budget (All other programs)							
Revenues	667	726	784	828	876	933	993
Outlays	861	942	990	1,047	1,103	1,174	1,235
Deficit	194	215	206	219	227	242	241
Total							
Revenues	909	991	1,071	1,138	1,207	1,287	1,372
Outlays	1,064	1,152	1,212	1,282	1,348	1,430	1,500
Deficit	155	161	141	144	141	143	128

SOURCE: Congressional Budget Office.

Like Social Security, these other funds collect income from a wide variety of sources, including receipts from the public (such as taxes and premiums) and intrabudgetary transfers (such as interest payments, government agencies' payments for employee retirement, and the general fund contribution to Medicare's Supplementary Medical Insurance program). Of the major trust funds, only Social Security and Hospital Insurance (a part of the Medicare program) run large surpluses if intrabudgetary transactions are excluded. Of the others, Medicare's Supplementary Medical Insurance program, Military Retirement, and Civil Service Retirement receive most of their funding from various intrabudgetary transfers. Because of their heavy reliance on such transfers, these funds' surpluses, as typically measured, do not meaningfully describe their contribution to the deficit totals or government borrowing requirements.

TABLE II-6. TRUST FUND SURPLUSES IN THE CBO BASELINE
(By fiscal year, in billions of dollars)

	Actual 1988	1989	1990	1991	1992	1993	1994
Social Security	39	54	65	75	86	99	113
Medicare	15	21	23	21	17	15	13
Military Retirement	14	15	14	14	15	15	16
Civilian Retirement[a]	19	20	21	23	24	26	28
Unemployment	8	8	9	6	4	4	3
Highway and Airport	2	4	2	1	1	1	c
Other[b]	1	c	2	2	2	1	1
Total Trust Fund Surplus	98	121	135	143	150	162	175
Federal Funds Deficit	-253	-283	-276	-287	-291	-304	-303
Total Deficit	-155	-161	-141	-144	-141	-143	-128

SOURCE: Congressional Budget Office.

a. Includes Civil Service Retirement, Foreign Service Retirement, and several smaller funds.

b. Primarily Railroad Retirement, Employees' Health Insurance and Life Insurance, and Hazardous Substance Superfund.

c. Less than $500 million.

THE OUTLOOK UNDER THE POLICIES OF THE BUDGET RESOLUTION

Soon after taking office, President Bush announced his Administration's willingness to join in budget negotiations with Congressional leaders. These talks culminated in a summit agreement on the 1990 budget announced in April. Shortly thereafter, both houses of the Congress passed a budget resolution consistent with the summit agreement that specified, in greater detail, the totals for various programs and assigned to Congressional committees the responsibility for achieving specific deficit reduction goals.

A few elements of the summit agreement do not require legislation but will instead be carried out administratively. These include accelerating payments under some farm price support programs and taking a one-time credit in 1990 for food stamps issued in previous years but not redeemed. These changes are already incorporated in CBO's new baseline projections. Table II-7 spells out further deficit reductions that must be accomplished to carry out the summit agreement.

Temporary and Permanent Deficit Reductions

As Table II-7 shows, the summit agreement contained substantial amounts of one-time savings to achieve deficit reduction goals in 1990. As just noted, the Administration has already taken steps to speed up farm deficiency payments and to write off uncashed food stamps. The largest remaining one-time saving is $5.7 billion from the sale of government assets. The reported deficit would also be reduced by $2.2 billion as a consequence of removing the Postal Service and the Farm Credit Financial Assistance Corporation from the budget. Savings from these changes, however, do not persist in later years.

More substantive, permanent savings would reduce the deficit by about $14 billion in 1990 and slightly larger amounts in later years. Roughly half of the permanent savings in the first few years are to come from taxes and fees. The budget resolution aimed to achieve unspecified tax increases of $5.3 billion a year in the 1990-1992 period; in addition, it sought annual gains of $0.5 billion and up from devoting

TABLE II-7. CONFERENCE AGREEMENT ON THE FISCAL YEAR 1990 BUDGET RESOLUTION (By fiscal year, in billions of dollars)

	1990	1991	1992	1993	1994
Budget Basis					
CBO Baseline Deficit[a]	141	144	141	143	128
Programmatic Adjustments[b]	1.1	1.0	2.3	3.7	4.8
Budget Resolution Baseline	142	145	143	146	132
Permanent Policy Changes					
Tax revenues[c]	-5.3	-5.3	-5.3	-5.3	-5.3
Tax compliance[c]	-0.5	-0.9	-1.0	-1.0	-1.0
User fees (Offsetting receipts)	-2.5	-3.3	-2.5	-2.6	-2.9
Defense	-1.8	-4.9	-4.9	-4.7	-4.6
Nondefense discretionary	-1.3	2.4	3.0	3.0	3.0
Medicare	-2.3	-2.3	-2.3	-2.3	-2.3
Agriculture	-0.6	-0.6	-0.6	-0.6	-0.6
Postal benefits	-0.5	-0.5	-0.5	-0.5	-0.5
Other	0.3	-0.2	-0.2	-0.1	-0.1
Debt service	-0.9	-2.4	-3.8	-5.1	-6.5
Subtotal	-15.4	-18.0	-18.0	-19.2	-20.8
Accounting Changes, One-Time Savings, and Asset Sales					
Postal Service off-budget	-1.8	0.6	-0.8	0.7	0.7
Farm Credit assistance off-budget	-0.4	-0.5	-0.4	d	d
Veterans loan assets	-0.5	-0.6	-0.6	-0.6	-0.6
Lump-sum pension payments	-0.6	0	0	0	0
Asset sales	-5.7	0.6	0.6	0.6	0.6
Subtotal	-8.9	0.1	-1.2	0.6	0.7
Total Changes	-24.3	-17.9	-19.2	-18.6	-20.1
Budget Resolution Deficit	118	127	124	128	112
National Income and Product Accounts Basis					
CBO Baseline Deficit	120	122	118	109	98
Total Changes	-14.9	-16.4	-15.2	-14.9	-15.4
Budget Resolution Deficit	105	106	103	94	82

SOURCE: Congressional Budget Office.

NOTE: The budget resolution covers fiscal years 1990 through 1992; CBO has extrapolated the policies of the budget resolution through 1994.

a. The 1990 baseline deficit includes savings from shifting the military pay date ($2.1 billion), advancing farm deficiency payments ($850 million), and writing off uncashed food stamps ($477 million).

b. Assumes renewal of expiring subsidized housing contracts, additional funding for the decennial census, and other smaller items.

c. Revenue increases appear as negative numbers because they reduce the deficit.

d. Less than $50 million.

more resources to Internal Revenue Service enforcement of tax laws. Fees totaling $2.5 billion or more annually are to be levied on producers of chlorofluorocarbons and users of government services.

Savings in defense outlays contribute nearly $2 billion in 1990 and almost $5 billion annually in later years, as growth in defense budget authority is constrained to about 2 percent in 1990--less than half the projected rate of inflation. Small savings in nondefense discretionary programs in 1990 turn into modest increases in later years, because the budget resolution would increase budget authority for this category above the baseline. These updated estimates of defense and nondefense discretionary savings differ from the initial ones, principally because recent legislation and administrative actions--namely, the emergency supplemental appropriation and the shift in the military pay date--have affected the baseline in the meantime. Other permanent savings are to be achieved principally in agriculture, in Medicare, and through lower debt service costs.

Responsibility for carrying out the savings in the budget resolution is spread among many Congressional committees. Discretionary savings are to be achieved by keeping the 13 regular appropriation bills within the confines of the budget resolution. Writing legislation to raise taxes and fees and save money in entitlement programs is the job of tax-writing and authorizing committees, which must prepare reconciliation language for their areas of jurisdiction. Although the budget resolution set targets for three years, many of the 1991 and 1992 goals are nonbinding, raising the possibility that some of the reductions might have more modest effects in later years than suggested in Table II-7. Finally, responsibility for achieving some of the savings--notably from asset sales and some of the user fees--is not assigned to any Congressional committee; in any event, the asset sales would not count for purposes of evaluating compliance with the Balanced Budget Act.

The Budget in the National Income and Product Accounts

Heavy reliance on one-time savings in the 1990 budget resolution spotlights some limitations of federal budget accounting from an economic perspective. Measures such as asset sales affect the deficit in one year but leave the government's long-run financial condition unaffected. Budget analysts must also struggle with the shifting importance of large lending or financial transactions in the budget totals. A dollar lent by the government is counted as a dollar spent, but the two do not have the same economic implication. Similarly, spending for purposes such as deposit insurance--currently a costly item for the government--does not boost private incomes in the same way as, say, defense spending or transfer programs do.

Economists cope with these limitations by relying on the alternative measures of federal government receipts and expenditures depicted in the National Income and Product Accounts (NIPA). The income and product accounts attempt to exclude those government transactions that have little macroeconomic impact.

Normally the two measures of the deficit--the budget and the NIPA--move roughly in tandem, with the budget deficit slightly exceeding the NIPA measure. Both clearly heralded the advent of large deficits in the early 1980s and the post-1986 decline. The large and somewhat erratic contribution of factors such as deposit insurance, lending activity, and asset sales, however, has sometimes led the two measures to send contradictory signals about the apparent direction of fiscal policy. The analysis of the federal government's fiscal stance in Chapter I focuses on the deficit as measured in NIPA terms.

As shown in the bottom panel of Table II-7, the deficit reductions in the summit agreement--measured on a NIPA basis--are more modest than those calculated on a budgetary basis. Most of the savings categorized as one-time or accounting in nature do not affect the NIPA deficit, because they represent swaps of existing assets, timing shifts, or other transactions that do not affect current production or incomes. A more extensive description of the relationship between the budget and NIPA measures, and a full presentation of CBO's budget projections in NIPA terms, is found in Appendix B.

THE BUDGET OUTLOOK AND THE BALANCED BUDGET ACT

In 1987, the Congress adopted a revised set of deficit targets culminating in a balanced budget by 1993. The law also provided for automatic, across-the-board cutbacks in many spending programs at the start of a fiscal year if Administration projections indicate that the deficit will exceed the target by more than $10 billion (or will exceed the target at all in 1993). Deficit targets under the act are shown in Table II-1. For fiscal year 1990, the target is $100 billion, declining in steps to zero by 1993.

If today's policies remain unchanged, CBO estimates that the deficit will exceed the act's targets by widening amounts (see Figure II-1). Fully implementing the policies of the budget resolution would bring the deficit within striking distance of the target in 1990 but continue to leave a growing gap in later years.

CBO's views, however, do not determine the necessity for across-the-board cutbacks. The Supreme Court found the original version of the act unconstitutional, because it gave a key role to a legislative branch officer (the Comptroller General) in carrying out an executive function. As amended, the act assigns the task of determining compliance with the targets and ordering any across-the-board cutback to the Director of the Office of Management and Budget (OMB). The law charges CBO, however, with issuing its own, advisory projections as a benchmark with which the OMB estimate can be compared.

The Timetable Under the Balanced Budget Act

The Balanced Budget Act specifies a number of dates on which key events take place. CBO is required to issue an advisory report on August 21, detailing its budget projections for fiscal year 1990 and its estimates of required across-the-board cutbacks. As the law stipulates, that report must reflect policies in place in mid-August, and exclude any savings that are envisioned (but yet to be enacted) under the budget resolution.

The report points out that the deficit is likely to exceed the $100 billion target by $41.5 billion, or about 3½ percent of total spending. The implied sequestration of funds would be considerably larger than that, because large parts of the budget--including many benefit programs, spending from prior obligations, and net interest costs--are exempt from these across-the-board cutbacks. The law requires that half of the required outlay savings come from defense programs and the other half from domestic programs. CBO's analysis indicates that achieving $41.5 billion in deficit reduction by applying the act's provisions would involve reductions of about 11 percent in defense programs and 16 percent in nondefense, nonexempt programs.

OMB will issue its report on August 25, and will, as explained below, estimate a significantly smaller deficit than does CBO. At that time, OMB will also issue a preliminary sequestration order. After returning from its recess in early September, the Congress will spend the rest of that month and early October working on budgetary legislation. A revised CBO report and a final OMB report incorporating the effects of newly enacted legislation will be released on October 10 and October 16, respectively. The final OMB report will be accompanied by a sequestration order, if required.

In addition to this sequence of reports mandated by the Balanced Budget Act, policymakers face another budget deadline this fall: the need to increase the government's debt issuance authority. Box II-1 reports recent legislation on the debt limit and explains the need for further action.

OMB and CBO Estimates for Fiscal Year 1990

Because OMB's estimates of the next year's deficit are more optimistic than CBO's, they imply much less likelihood of large across-the-board cutbacks. In its mid-session review released on July 18, OMB previewed this estimate, projecting a 1990 deficit for purposes of the Balanced Budget Act of $128 billion--an estimate, of course, that predated passage of the savings and loan legislation. In the same report, OMB asserted that a predominantly off-budget savings and loan solution would reduce that deficit by $13 billion. Another piece of recent legislation, the drought relief bill, would add approximately $1 billion to OMB's estimate. In sum, legislation enacted since mid-July will probably lead OMB to revise its estimate of the deficit downward to approximately $116 billion when it publishes its revised estimates later this month.

At about $116 billion, OMB's estimate of the 1990 deficit for purposes of the Balanced Budget Act would be approximately $25 billion below CBO's. About $8 billion of the difference between the two agencies' estimates stems from contrasting economic assumptions.

BOX II-1
THE DEBT LIMIT

Before departing for its summer recess, the Congress voted to raise the limit on federal debt by $70 billion through October 31, 1989. The increase brings the ceiling to $2,870 billion.

With narrow exceptions, this limit applies to all federal debt, a figure that greatly exceeds the amount held by the public. As Table II-1 shows, CBO's estimate of debt held by the public at the end of fiscal year 1989 is only $2,196 billion.

The debt subject to limit is much higher than debt held by the public, because it includes securities issued to federal government trust funds such as Social Security. When trust funds receive earmarked income that exceeds their spending, they are required to invest the excess in special Treasury securities. In June 1989, trust funds held over $600 billion of such securities. Interest on these securities is intrabudgetary: it is both paid and collected by the government, and therefore does not add to the deficit. Nevertheless, these holdings count against the debt limit.

Debt held by the public, in contrast, represents only the amounts borrowed over the years to finance deficits and is the number most watched by economists and financial market participants. It quickly reveals the government's past and future demands on credit markets. It is also the chief determinant of the government's net interest costs.

The $70 billion temporary increase in the debt limit is $15 billion bigger than it seems at first blush, because it includes a change in the definition of debt subject to limit. The change will accommodate the issuance of deep-discount securities, including the sale of zero-coupon bonds to the Resolution Funding Corporation (REFCORP). Zero-coupon bonds pay no periodic interest, but return at maturity an amount much greater than their initial purchase price. The difference between the purchase price and the payment at maturity is the issuer's interest cost.

OMB projects higher revenues, lower net interest costs, and lower outlays for benefit programs than does CBO. Another $12 billion stems from differing technical assumptions, mainly in projections of on-budget spending related to savings and loans. As previously explained, CBO believes that a portion of the $20 billion infusion of funds that became available immediately under the new law will actually be spent early in fiscal year 1990; furthermore, CBO believes that the

Previously, the law required counting such securities at their full face value--that is, their value at maturity--against the debt limit. This treatment would have ballooned the debt subject to limit. As a result, with only one exception (a Mexican debt restructuring), the Treasury has refrained from issuing zero-coupon securities in the past. The current zero-coupon market instead reflects regular Treasury bonds that have been stripped by financial firms.

Under the new rules, such securities will be counted initially at their issue price and their value gradually increased as they approach maturity. This approach makes economic sense; in fact, it was already in use for debt held by the public. The change has no effect on interest costs, which were and will continue to be shown on an accrual basis that is not dependent on payment of cash interest. It amounts, however, to a retrospective adjustment of $15 billion in debt subject to limit, representing $2 billion for the Mexican zeroes and $13 billion for discounts on Treasury bills and other marketable debt.

The debt subject to limit will climb rapidly between now and late October. The next two-and-a-half months will see heavy borrowing by the federal government, particularly because of the new savings and loan legislation. Trust fund investment activity will also be heavy, as both the Civil Service Retirement and Military Retirement Trust Funds receive large lump-sum appropriations that are immediately invested.

In the absence of a further increase in the debt limit, the Treasury cannot issue any debt after October 31. Its cash will hemorrhage rapidly, as it must make large benefit payments in early November and pay off existing debt as it matures. The need for a further increase in the debt limit will coincide with many other budgetary measures that must be considered between now and October, including appropriation bills and reconciliation bills. In the past, the debt limit has also served as a vehicle for revisions in the budget process and targets.

newly created Resolution Trust Corporation will use its authority to issue some notes in 1990, further boosting outlays. Remaining, conceptual differences total $6 billion, and are dominated by a $4 billion downward adjustment made by OMB to comply with provisions of the law circumscribing changes in its assumptions about how fast defense budget authority results in outlays.

BUDGET PROJECTIONS AND ECONOMIC ASSUMPTIONS

As the disparity between OMB's and CBO's estimates of the deficit suggests, budget projections are sensitive to the economic assumptions underlying them. Hardly any part of the federal budget is not linked in some way to the performance of the economy. Revenues are closely tied to wages and salaries, corporate profits, and other taxable incomes that are affected by the economy. Nearly all the large benefit programs administered by the government are indexed to inflation; some are sensitive to the rate of unemployment as well. Defense and nondefense discretionary programs are assumed in the baseline to keep pace with inflation, to avoid the erosion of real resources that would otherwise occur. Finally, the government's cost of servicing its large and growing debt depends on market interest rates.

Rough rules of thumb are commonly used to illustrate this sensitivity of the budget projections to individual economic assumptions. This rule-of-thumb approach is overly simple, of course, because changes in the economy usually affect many variables simultaneously--growth, inflation, interest rates, and the performance of specific sectors. But it helps to identify the most critical economic assumptions and shows how changes in them can affect the budget projections, illustrating the direction and approximate size of the relationship.

A key measure of the economy's performance is the rate of real economic growth. CBO assumes, as reported in Chapter I, that the economy will grow about 1.7 percent in real terms in calendar year 1990, and about 2¼ percent on average during the next five years. Growth rates lower than these would markedly worsen the deficit, by slowing revenue growth, increasing benefit outlays, and raising debt service costs. CBO estimates that, if real growth were one percentage point lower each year beginning in late 1989 (equaling only 0.7 percent in 1990 and averaging about 1¼ percent annually over the next five years), the deficit would increase by $12 billion in 1990 and $116 billion by 1994, compared with the baseline. Such a large error in the real growth assumption seems relatively unlikely for the full five-year period, but could occur in 1990, when some forecasters are projecting even slower growth or a recession. Conversely, faster economic growth would tend to boost revenues, shrink spending, and reduce the deficit.

With debt held by the public at $2 trillion and growing, interest rates are another key influence on federal government outlays. They are also notoriously difficult to forecast, with year-ahead errors of one, two, or three percentage points being quite common. If interest rates for all maturities--short-, medium-, and long-term--were one percentage point higher beginning in late 1989 than CBO assumes, and remained higher for the entire five-year period, the deficit would rise by $5 billion in 1990, $11 billion in 1991, and $25 billion in 1994. Interest rates one percentage point lower than CBO assumes would have almost exactly the opposite effect.

APPENDIXES

APPENDIX A

HISTORICAL BUDGET DATA

Tables A-1 and A-2 update the outlay data for fiscal years 1962 through 1988 presented in CBO's February 1989 annual report. The grand totals have not changed, but some programs have been shifted from one category of spending to another. This movement among categories follows the scorekeeping guidelines for the bipartisan budget agreement of April 14, 1989 (see Chapter II).

The changes include the following:

- The conservation reserve program, the administrative expenses for Supplemental Security Income and the Federal Housing Administration, and several smaller budget accounts have been moved from the mandatory to the nondefense discretionary category;
- Proceeds from the sale of enriched uranium, formerly included in offsetting receipts, are now treated as an offset to nondefense discretionary spending;
- Spending for fighting wildfires and the outlays of the Postal Service fund are now categorized as mandatory rather than as nondefense discretionary.

These changes decrease nondefense discretionary outlays by $2.8 billion in 1988, increase entitlements and other mandatory spending by $1.6 billion, and change offsetting receipts by $1.2 billion.

With one exception, the categories of spending used in this report conform to those used in the budget agreement. In Congressional budget scorekeeping, the outlays of the Farmers Home Administration (FmHA) and the Rural Electrification Administration (REA) revolving funds are split among committees. The baseline outlays are charged to the responsible authorizing committees. Any divergence of estimated

TABLE A-1. OUTLAYS FOR MAJOR SPENDING CATEGORIES, FISCAL YEARS 1962-1988 (In billions of dollars)

Fiscal Year	National Defense	Entitlements and Other Mandatory Spending	Nondefense Discretionary Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	52.3	30.7	23.9	6.9	-7.0	106.8
1963	53.4	33.2	25.1	7.7	-8.1	111.3
1964	54.8	34.4	29.0	8.2	-7.8	118.5
1965	50.6	34.7	32.3	8.6	-8.0	118.2
1966	58.1	37.5	38.1	9.4	-8.5	134.5
1967	71.4	45.3	40.8	10.3	-10.3	157.5
1968	81.9	52.3	43.6	11.1	-10.8	178.1
1969	82.5	58.5	41.1	12.7	-11.1	183.6
1970	81.7	66.2	45.0	14.4	-11.6	195.6
1971	78.9	80.6	50.1	14.8	-14.2	210.2
1972	79.2	94.2	56.1	15.5	-14.2	230.7
1973	76.7	110.2	59.6	17.3	-18.1	245.7
1974	79.3	124.4	65.4	21.4	-21.3	269.4
1975	86.5	156.4	84.7	23.2	-18.5	332.3
1976	89.6	182.8	92.4	26.7	-19.7	371.8
1977	97.2	196.5	107.2	29.9	-21.6	409.2
1978	104.5	216.3	125.5	35.4	-23.0	458.7
1979	116.3	234.2	136.3	42.6	-26.1	503.5
1980	134.0	277.2	157.6	52.5	-30.3	590.9
1981	157.5	320.4	170.8	68.7	-39.2	678.2
1982	185.3	356.0	156.6	85.0	-37.2	745.7
1983	209.9	398.8	156.0	89.8	-46.1	808.3
1984	227.4	394.7	163.9	111.1	-45.3	851.8
1985	252.7	437.3	174.9	129.4	-48.0	946.3
1986	273.4	454.8	173.2	136.0	-47.0	990.3
1987	282.0	472.4	163.2	138.6	-52.3	1,003.8
1988	290.4	502.7	174.1	151.7	-54.9	1,064.1

SOURCE: Congressional Budget Office.

TABLE A-2. OUTLAYS FOR MAJOR SPENDING CATEGORIES, FISCAL YEARS 1962-1988 (As a percentage of GNP)

Fiscal Year	National Defense	Entitlements and Other Mandatory Spending	Nondefense Discretionary Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	9.4	5.5	4.3	1.2	-1.3	19.2
1963	9.1	5.7	4.3	1.3	-1.4	18.9
1964	8.7	5.5	4.6	1.3	-1.2	18.8
1965	7.5	5.2	4.8	1.3	-1.2	17.6
1966	7.9	5.1	5.2	1.3	-1.2	18.2
1967	9.0	5.7	5.1	1.3	-1.3	19.8
1968	9.6	6.2	5.1	1.3	-1.3	21.0
1969	8.9	6.3	4.4	1.4	-1.2	19.8
1970	8.2	6.7	4.5	1.5	-1.2	19.8
1971	7.5	7.6	4.7	1.4	-1.3	19.9
1972	6.9	8.2	4.9	1.3	-1.2	20.0
1973	6.0	8.6	4.7	1.4	-1.4	19.2
1974	5.6	8.8	4.6	1.5	-1.5	19.0
1975	5.7	10.3	5.6	1.5	-1.2	21.8
1976	5.3	10.8	5.4	1.6	-1.2	21.9
1977	5.0	10.2	5.5	1.5	-1.1	21.2
1978	4.8	10.0	5.8	1.6	-1.1	21.1
1979	4.8	9.6	5.6	1.7	-1.1	20.6
1980	5.0	10.4	5.9	2.0	-1.1	22.1
1981	5.3	10.7	5.7	2.3	-1.3	22.7
1982	5.9	11.3	5.0	2.7	-1.2	23.8
1983	6.3	12.0	4.7	2.7	-1.4	24.3
1984	6.2	10.7	4.4	3.0	-1.2	23.1
1985	6.4	11.1	4.4	3.3	-1.2	23.9
1986	6.5	10.9	4.1	3.2	-1.1	23.7
1987	6.4	10.7	3.7	3.1	-1.2	22.6
1988	6.1	10.5	3.6	3.2	-1.1	22.3

SOURCE: Congressional Budget Office.

outlays from the baseline level that results from a change in loan limitations is charged to the Appropriations Committee. Because such a distinction cannot be made in the historical data and because spending for these programs is ultimately controlled by the Appropriations Committee, CBO categorizes all FmHA and REA outlays as discretionary.

APPENDIX B

FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS

Both the budget and the federal sector of the National Income and Product Accounts (NIPA) measure the receipts and expenditures of the federal government. The national income accounts, published by the Department of Commerce, measure current income and production in all sectors of the economy and are the most widely used indicators of current economic activity. While similar to the budget, the NIPA federal sector is often more useful for analyzing the economic impact of federal government activity. The NIPA treatment of federal government activity differs from that of the budget in four ways: the netting and grossing of receipts against spending, the exclusion of lending and financial activities, timing adjustments, and coverage, as shown in Table B-1.

Differences in netting and grossing arise because two types of collections are treated as negative outlays in the budget but are moved to the receipts side in the NIPA. The first type of collection represents contributions by federal agencies to the Civil Service Retirement Trust Fund, Social Security, and other benefit plans. As an intrabudgetary transaction, this transfer represents both a cost to the employing agencies and a receipt to the retirement fund. The second type of collection consists of voluntary payments (such as Medicare premiums and mineral leases), which are also recorded as negative outlays. Clearly, moving these collections from expenditures to receipts does not affect the measured deficit. It does, however, more accurately depict the government's total collections from all sources.

Lending and financial transactions that involve only the exchange of existing assets and liabilities are generally excluded from the NIPA, since they generate no current income or output. For example, the sale of a government asset, such as Conrail, reduces the budget deficit but has no effect on the NIPA deficit. Similarly, direct lending by the Export-Import Bank, the Farmers Home Administration, and other agencies is excluded from the NIPA, as are any payments by the

TABLE B-1. RELATIONSHIP OF THE BUDGET TO THE FEDERAL SECTOR OF THE NATIONAL INCOME AND PRODUCT ACCOUNTS (By fiscal year, in billions of dollars)

	Base	Projections				
	1989	1990	1991	1992	1993	1994
		Receipts				
Total Revenues (Budget Basis)[a]	991	1,071	1,138	1,207	1,287	1,372
Differences						
Netting and grossing						
Government contributions for employee retirement	41	44	47	50	54	57
Medicare premiums	12	13	15	17	18	19
Other	8	8	7	7	8	8
Geographic exclusions	-2	-2	-2	-2	-2	-3
Other	-4	b	1	3	3	5
Total differences	54	62	68	75	80	87
Total Receipts (NIPA Basis)	1,045	1,134	1,205	1,282	1,367	1,459
		Expenditures				
Total Outlays (Budget Basis)[a]	1,152	1,212	1,282	1,348	1,430	1,500
Differences						
Netting and grossing						
Government contributions for employee retirement	41	44	47	50	54	57
Medicare premiums	12	13	15	17	18	19
Other	8	8	7	7	8	8
Lending and financial transactions						
Bonuses on Outer Continental Shelf land leases	1	1	1	1	1	1
Other	-32	-25	-20	-17	-27	-15
Defense timing adjustment	1	6	2	2	1	-3
Geographic exclusions	-6	-7	-7	-7	-8	-8
Other	b	1	b	b	b	-2
Total differences	24	41	45	52	46	57
Total Expenditures (NIPA Basis)	1,177	1,254	1,327	1,400	1,476	1,557
		Deficits				
Total Deficit (Budget Basis)[a]	161	141	144	141	143	128
Differences						
Lending and financial	-31	-24	-19	-16	-26	-14
Defense timing adjustment	1	6	2	2	1	-3
Geographic exclusions	-4	-5	-5	-5	-5	-6
Other	5	1	b	-3	-3	-7
Total Deficit (NIPA basis)	131	120	122	118	109	98

SOURCE: Congressional Budget Office.

a. Includes Social Security.

b. Less than $500 million.

government to make good on guaranteed loans in default. (Interest paid or received in the course of financial transactions, of course, is reflected in the NIPA federal sector.) Bonuses on Outer Continental Shelf land leases--much smaller now than in the early 1980s--also reflect the exchange of existing assets and are excluded from the NIPA. Nonrecourse agricultural loans are an exception to the general rule. Many of these loans, extended by the Commodity Credit Corporation, are not repaid but instead result in the government's acquisition of crops pledged as collateral. The income and product accounts count these loans as additional nondefense purchases when they are made and as a reduction in purchases if they are subsequently repaid and CCC inventories reduced.

Similarly, spending for deposit insurance--notably to resolve insolvent savings and loan institutions--is largely excluded from the NIPA. Spending for deposit insurance is akin to payments for loan defaults and does not directly generate higher profits or other income. Therefore, it is excluded from the NIPA measures of federal spending.

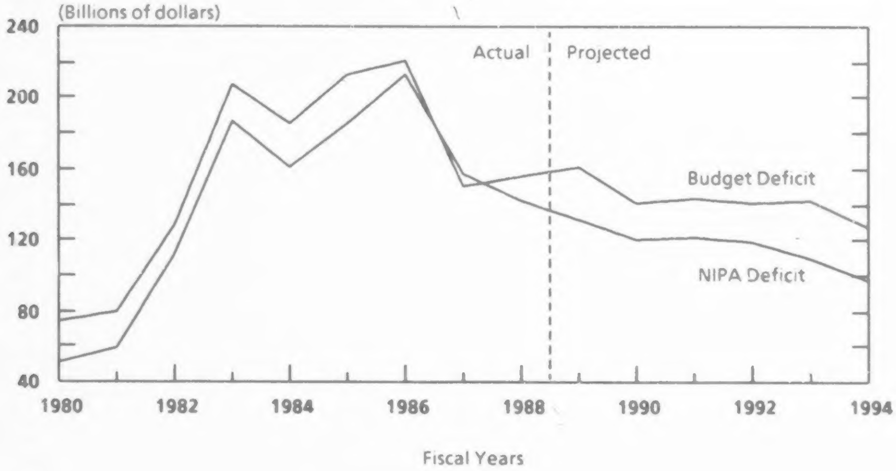
Timing differences occur because the budget logs most transactions (except interest owed to the public) on a cash basis, while the NIPA federal sector may substitute an accrual measure, where appropriate. On the receipts side, the most important difference in timing is the recording of corporate profit taxes in the NIPA at the time the tax liability is incurred, which may be months (or years) before the tax payment is deposited in the Treasury. On the expenditures side, the only major example is the defense timing adjustment. Primarily, it adjusts the NIPA to record purchases of major weapons systems at the time of delivery rather than at the time payment is made. Advancing the October 1, 1989, payday for military personnel to September 29, 1989, is also reflected as a change in the defense timing adjustment rather than a change in government purchases of goods and services.

During the past 10 years, the NIPA deficit and the budget deficit have generally paralleled each other, with the NIPA deficit several billion dollars lower than the budget deficit (see Figure B-1). Both measures show deficits gradually falling off after peaking in 1986. Variations in the relationship between the two have been dominated by the large swings in lending and financial exclusions. During 1987, when lending and financial exclusions were at their 10-year low, the NIPA deficit actually exceeded the budget deficit by $8 billion.

In CBO's current baseline projections, changes in spending or deposit insurance cause sharp swings in the gap between the projected NIPA and budget deficits. Placing most assistance to troubled financial institutions on-budget in 1989 causes the budget deficit to exceed the NIPA deficit by $30 billion. The gap shrinks to $21 billion in 1990, when a substantial amount of assistance is excluded from the budget.

Differences in coverage between the budget and NIPA largely reflect the exclusion of Puerto Rico, the Virgin Islands, and other territories for purposes of computing the gross national product (GNP) and related data series in the NIPA.

Figure B-1.
Deficit as Measured by the National Income and Product Accounts and the Budget



SOURCE: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

TABLE B-2. PROJECTIONS OF BASELINE RECEIPTS AND EXPENDITURES ON A NATIONAL INCOME AND PRODUCT ACCOUNTS BASIS

(By fiscal year, in billions of dollars)

	Base	Projections				
	1989	1990	1991	1992	1993	1994
Receipts						
Personal Tax and Nontax Receipts	452	501	537	574	615	657
Corporate Profits Tax Accruals	118	126	132	139	148	160
Indirect Business Tax and Nontax Accruals	58	59	58	59	61	64
Contributions for Social Insurance	417	448	478	509	542	578
Total Receipts	1,045	1,134	1,205	1,282	1,367	1,459
Expenditures						
Purchases of Goods and Services						
Defense	303	312	323	335	349	364
Nondefense	97	110	114	118	124	130
Total	401	422	437	453	473	493
Transfer Payments	462	502	544	587	630	676
Grants-in-Aid to State and Local Governments	116	124	131	138	146	155
Net Interest Paid	171	183	192	198	206	213
Subsidies Less Current Surplus of Government Enterprises	27	23	23	23	21	20
Total Expenditures	1,177	1,254	1,327	1,400	1,476	1,557
Deficit						
Deficit	131	120	122	118	109	98

SOURCE: Congressional Budget Office.

The NIPA federal sector attempts to measure budget transactions according to their economic significance. Government purchases of goods and services, which are subdivided into defense and nondefense, directly add to GNP. The other classifications--grants-in-aid, transfer payments, net interest, and subsidies less current surplus--reflect government payments to individuals or to state and local governments, which in turn purchase goods and services. Therefore, these types of federal government spending have a less direct effect on GNP. Table B-2 (on the previous page) shows estimates of federal sector receipts and expenditures on a NIPA basis, consistent with current CBO baseline budget projections.

As discussed in Chapter II, the Congress adopted in May a budget resolution that is intended to reduce the budget deficit in 1990 and beyond. Carrying out the policies of the 1990 Congressional budget resolution would reduce the deficit in the federal sector of the NIPA by roughly $18 billion per year, as shown in Table B-3. The programmatic adjustments and permanent deficit reductions listed in Table II-7 affect both the NIPA and budget deficits. The accounting changes and asset sales, however, reduce the budget deficit but not the NIPA deficit.

TABLE B-3. FEDERAL SECTOR DEFICIT IN THE NATIONAL INCOME AND PRODUCT ACCOUNTS UNDER BUDGET RESOLUTION POLICY (By fiscal year, in billions of dollars)

	1989	1990	1991	1992	1993	1994
Baseline NIPA Deficit	131	120	122	118	109	98
Programmatic adjustments	0	1	1	2	4	5
Permanent deficit reduction	0	-15	-18	-18	-19	-21
Other	0	-1	1	1	1	1
Total Changes	0	-15	-16	-15	-15	-15
NIPA Deficit Under Budget Resolution	131	105	106	103	94	82

SOURCE: Congressional Budget Office.

APPENDIX C

FARM COMMODITY PROGRAM SPENDING

The weather is again dominating the near-term outlook for farm price and income support spending by the U.S. Department of Agriculture's Commodity Credit Corporation (CCC). Dry weather, a continuation of last summer's drought, devastated this year's winter wheat crop. At the other extreme, wet conditions delayed or prevented plantings of corn and cotton in some parts of the country.

CBO now projects that CCC outlays will total $12.6 billion in 1989 and $9.8 billion in 1990 (see Table C-1). Of these projected amounts, $0.1 billion in 1989 and $1.0 billion in 1990 are costs of the recently enacted Disaster Assistance Act of 1989. This act, which is similar to one aiding last year's drought victims, provides direct payments and other forms of disaster aid to producers adversely affected by bad weather.

Projected CCC outlays are lower than they would have been with normal weather. This year's weather problems mostly affect 1990 outlays. Bad weather cuts production, which raises prices and lowers government payments to farmers. This season's weather problems are causing outlays for regular CCC programs (outlays other than disaster assistance) to be about $1.9 billion lower in 1990 than they would have been with normal crops.

Weather problems in the 1988 growing season were more widespread than those being experienced this year. Outlays for regular CCC programs in 1989 are lower by an estimated $6.8 billion compared with what they would have been with normal crops. Much of this spending reduction is offset by the $4.5 billion of CCC disaster assistance, most of which was authorized in the Disaster Assistance Act of 1988.

TABLE C-1. CBO PROJECTIONS FOR OUTLAYS OF THE COMMODITY CREDIT CORPORATION
(By fiscal year, in billions of dollars)

Commodity	Actual 1988	Projected 1989	1990	1991	1992	1993	1994
Corn and Other Feed Grains	9.1	4.1	5.4	7.0	5.9	5.0	4.5
Wheat	0.7	0.2	0.2	1.3	1.8	1.9	1.8
Rice	0.1	0.7	0.4	0.6	0.7	0.8	0.8
Upland Cotton	0.7	1.6	0.3	0.9	0.9	0.9	0.8
Soybeans	-1.7	a	0.2	0.1	0.1	a	a
Dairy	1.3	0.7	0.7	0.6	0.6	0.5	0.3
Other Commodities	-0.5	-0.4	-0.1	-0.1	-0.1	0.1	0.1
Subtotal	9.6	7.1	7.1	10.4	9.9	9.1	8.2
Other Outlays	2.4	5.4	1.7	1.4	1.3	1.3	1.2
Disaster Assistance Act of 1989	0.0	0.1	1.0	b	0.0	0.0	0.0
Total	12.0	12.6	9.8	11.8	11.2	10.3	9.4

SOURCE: Congressional Budget Office, August 1989 projections.

a. Less than $50 million.

b. Negative outlays of less than $50 million.

Several factors other than changing weather conditions caused the CCC outlay projections for 1989 and 1990 to change since last February.[1] Stronger demand and higher prices than expected for cotton and rice cut projected outlays for these crop programs by substantial amounts in 1989 and 1990. These reductions were partly offset by increases in projected costs for the corn program. Reports on commodity stocks, released by the U.S Department of Agriculture (USDA) this spring, reveal that more corn will be available to the market than was expected earlier. Higher available supplies put downward pressure on prices, raising projected deficiency payments.

An administrative decision by the USDA to increase the size of the advance deficiency payment on 1989 crops raised 1989 outlays by

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[1] For an explanation of the assumptions underlying the February 1989 baseline for the CCC, see Congressional Budget Office, *The Outlook for Farm Commodity Program Spending, Fiscal Years 1989-1994* (May 1989).

$850 million and cut 1990 outlays by the same amount. The 1989 Dire Emergency Supplemental Appropriations Act (Public Law 101-45) caused a smaller shift of spending between the two years. This law requires that refunds of advance deficiency payments by farmers due to the CCC during 1989 be delayed until 1990. This change increases 1989 CCC net outlays by $64 million and reduces 1990 spending by the same amount. In another legislative change, Public Law 101-7 cut outlays by $10 million in 1989 and $25 million in 1990 by reducing the price that CCC pays for butter in the dairy program.

Outlays are projected to reach $11.8 billion in 1991 and decrease gradually to $9.4 billion by 1994. The current projection for 1991 exceeds the February baseline level by about $0.5 billion. The difference increases each year, reaching $3.5 billion in 1994. Most of this difference is the result of a change in the assumptions used to project the levels of target prices during the 1991-1994 period. As the Congress worked on its budget resolution earlier this year, questions arose over how the baseline should treat expiring provisions of farm price support programs. The law currently governing such programs expires after the 1990 crop year. The Balanced Budget Act states that the baseline for the upcoming year should assume continuation of the programs at current rates; it does not, however, offer clear-cut guidance for longer-term projections. In the past, CBO has assumed that target prices, which help determine payments to farmers, would gradually decline after the 1990 crop year, continuing the pattern set by the 1985 Food Security Act for 1985 through 1990. But in developing its own baseline for the budget resolution, the Congress chose instead to assume constant target prices after 1990. Because the Congress prefers to use this assumption and because the Balanced Budget Act can be interpreted to support this approach, CBO has adopted it for its new projections.

The CCC relies on a combination of program tools to affect farm production, commodity prices, and federal program costs. Acreage reduction and paid land diversion programs are used to reduce production and support prices of wheat, feed grains, cotton, and rice. Nonrecourse loans are used to support prices of wheat, feed grains, and soybeans. Export subsidies are used to encourage exports (mostly of wheat) by reducing the price to foreign buyers. Direct government purchases of dairy products are used to support the price of milk.

The Secretary of Agriculture has broad discretion in choosing how program tools are used. During the first years of the 1985 Food Security Act, the focus of the programs was to increase exports and reduce excess stocks. Reductions in price support levels and subsidies from the Export Enhancement Program encouraged exports. Acreage reduction programs curtailed production and allowed existing stocks, most of which were owned by the government or used as collateral for CCC loans, to enter the market.

Production shortfalls caused by the 1988 drought helped eliminate excess stocks of corn, soybeans, and wheat. Corn and soybean stocks are expected to grow this year, but stocks of wheat are expected to decline further. Excess rice and cotton stocks are also projected to be gone by the end of the 1989 crop year, ending July 1990.

The elimination of excess stocks allows future acreage reduction programs to be smaller. These programs are still assumed to be used over the projection period to avoid the accumulation of surpluses. Each year's domestic and export needs will be met by current production rather than by supplementing production with stocks from earlier years. Smaller acreage reduction programs benefit producers, because less land has to be idle to qualify for government programs.

Projected supply, use, and prices for major supported commodities are shown in Table C-2. Normal weather conditions are assumed to prevail in future years.

Corn. CBO projects that stocks remaining at the end of the 1988 crop year (August 1989) will be 1.83 billion bushels, about 6 percent larger than was expected last February. Stock reports issued this spring by USDA have indicated surprisingly large levels of stocks, implying weaker feed demand for corn by livestock producers than previously expected. CBO projects that feed demand will be about 300 million bushels lower for both the 1988 and 1989 marketing years, relative to levels expected in February. In 1988, weaker feed demand is partially offset by stronger exports, particularly increased sales to the Soviet Union. In 1989, weaker feed demand is nearly offset by a reduction in expected corn production. CBO currently projects planted acreage of only 72.8 million acres, down 3 million acres from earlier projections because of extremely wet weather this spring in much of the eastern

TABLE C-2. CBO PROJECTIONS FOR THE SUPPLY, USE, AND PRICE OF MAJOR FARM COMMODITIES SUPPORTED BY THE COMMODITY CREDIT CORPORATION (By crop year)

	1988	1989	1990	1991	1992	1993	1994
Corn **(In billions of bushels)**							
Production	4.92	7.51	7.96	8.08	8.27	8.39	8.51
Exports	2.10	1.83	1.96	2.06	2.14	2.20	2.27
Total Use	7.36	7.39	7.91	8.19	8.36	8.46	8.55
Ending Stocks	1.83	1.95	1.99	1.88	1.80	1.73	1.70
Price (Dollars per bushel)	2.54	1.99	1.97	1.99	2.09	2.17	2.23
Wheat **(In billions of bushels)**							
Production	1.81	2.12	2.51	2.56	2.59	2.63	2.68
Exports	1.44	1.25	1.36	1.42	1.50	1.55	1.55
Total Use	2.40	2.28	2.41	2.51	2.61	2.67	2.70
Ending Stocks	0.69	0.56	0.69	0.76	0.77	0.76	0.76
Price (Dollars per bushel)	3.72	3.92	3.50	3.26	3.19	3.24	3.28
Rice **(In millions of cwt)**							
Production	159.5	153.1	169.8	170.8	180.8	179.3	188.5
Exports	76.0	73.0	75.2	78.0	81.8	83.8	87.2
Total Use	162.2	162.7	168.1	174.0	181.4	186.5	192.7
Ending Stocks	32.4	26.8	32.7	33.6	37.3	34.6	34.9
Price (Dollars per cwt)	6.75	7.75	7.00	6.40	6.30	6.40	6.50
Cotton **(In millions of bales)**							
Production	15.1	11.7	13.4	13.1	13.4	13.6	13.9
Exports	6.3	7.7	6.6	6.4	6.5	6.5	6.7
Total Use	13.7	14.8	13.5	13.4	13.5	13.7	14.0
Ending Stocks	7.2	4.2	4.2	4.0	4.1	4.1	4.1
Price (Dollars per pound)	0.572	0.605	0.588	0.582	0.581	0.591	0.595
Soybeans **(In billions of bushels)**							
Production	1.54	1.97	1.92	1.94	1.96	2.00	2.04
Exports	0.55	0.64	0.67	0.68	0.69	0.71	0.72
Total Use	1.71	1.83	1.90	1.94	1.97	2.01	2.05
Ending Stocks	0.14	0.27	0.29	0.29	0.29	0.27	0.27
Price (Dollars per bushel)	7.33	5.63	5.30	5.24	5.31	5.28	5.30
Dairy Products[a] **(In billions of pounds)**							
Production	144.9	147.1	149.5	151.8	153.4	154.3	155.8
Commercial Use	136.0	138.2	139.9	142.4	145.2	148.3	150.6
CCC Removals[b]	9.7	9.1	9.8	9.5	8.3	6.2	5.4
Price Support[c] (Dollars per cwt)	10.60	10.60	10.10	9.60	9.10	8.60	8.60

SOURCE: Actual data from Department of Agriculture; projections from Congressional Budget Office's August 1989 projections.

NOTE: cwt = hundredweight.

[a] Dairy products are reported by fiscal year.

[b] Removals refer to government net purchases of dairy products for the purpose of supporting the farm price of milk.

[c] Price support in effect for the 12 months following January 1 of each year, except for 1989. For April through June 1989, the support price rose to $11.10 per cwt.

Corn Belt. Corn production for 1989 is expected to be 7.5 billion bushels, down more than 4 percent from February expectations. Overall, these factors are expected to cause market prices to be lower and government outlays for feed grains to be $330 million higher in fiscal year 1989 and $550 million higher in 1990 than expected in February. Program outlays for feed grains are projected at $5.4 billion in fiscal year 1990 before rising to $7.0 billion in 1991.

Wheat. The production shortfall caused by the 1989 drought in winter wheat areas, following the 1988 spring drought, is expected to cause wheat prices to rise above the 1988 level of $3.72 per bushel. Stocks remaining at the end of crop year 1989 (May 1990) will probably decrease again to below 600 million bushels--half the level of stocks on hand at the end of the 1987 crop year. With the percentage of acreage reduction for the 1990 crop at 5 percent and the overhang of government-held stocks largely gone, prices for wheat in later years are likely to hover around $3.25 per bushel. Even with levels of use below those previously forecast for the 1990-1994 period, stocks are not expected to exceed 800 million bushels, or 30 percent of total use. Cash outlays are projected at a low $238 million for fiscal year 1990 because of high market prices. These prices may cause repayments of deficiency payments advanced on the 1989 crops and loan repayments to exceed the value of new loans. In later years, however, market prices retreat from the drought-affected 1988 and 1989 levels, sharply raising outlays of deficiency payments.

Cotton and Rice. Prices for cotton and rice during the 1988 crop year were up sharply and are expected to remain higher than expected for the 1989 crop year. Higher prices cause projected outlays to decrease substantially. For both commodities, the strength of foreign demand for the 1988 crop was above expectations, and projected production for the 1989 crops is below expectations. Stocks projected at the end of both years decreased for both crops. Expected requirements for acreage reduction were reduced for both cotton and rice from levels projected last February.

Soybeans. Stocks remaining from the end of the 1989 marketing year (August 1990) and several years into the future are projected to be nearly 10 percent higher than previously expected because of a continuing loss of world market share to Brazil and Argentina. Market prices are projected to remain relatively weak because of rising stocks.

Most of the increased stocks will show up as higher loan activity within the nonrecourse loan program. Greater loan activity is expected to increase outlays for the soybean program by $119 million in fiscal year 1989 and by $108 million in fiscal year 1990, compared with the February projection.

Dairy. Dairy program outlays are expected to be below the previous baseline, and the supply and demand situation has shifted among dairy products. Butter has become the dominant dairy product removed from the market. More than 95 percent of the CCC net removals, on a milk-fat equivalent basis, was in butter. Recent legislation (Public Law 101-7) provided two opportunities for the Secretary to lower the purchase price of butter on April 1 and July 1, 1989, relative to the previous CBO baseline. When the price support for milk temporarily rose from $10.60 to $11.10 per cwt on April 1, the CCC purchase price for butter remained at the same level--$1.32 per pound. When the price support for milk reverted to $10.60 on July 1, the CCC downward adjustment of the purchase price was all reflected in butter, a reduction of 11.5 cents per pound. As a result, the total value of net removals was lowered.

Savings were partly offset by higher production and lower commercial use than expected. Commercial stocks were not rebuilt to the expected level. CCC net removals are running above projections for fiscal year 1989, and estimates for the projection period were increased. Therefore, support prices for milk are projected to be 50 cents lower for calendar years 1993 and 1994.

APPENDIX D

MAJOR CONTRIBUTORS TO THE REVENUE AND SPENDING PROJECTIONS

The following analysts prepared the revenue and spending projections in this report:

Revenue Projections

Mark Booth	Corporate income taxes, Federal Reserve System earnings
Maureen Griffin	Social insurance contributions, estate and gift taxes
Richard Kasten	Individual income taxes
Courtney Marsiglia	NIPA receipts
Eric Nicholson	Excise taxes
Kathleen O'Connell	Individual income taxes
Linda Radey	Excise taxes
Caroline Ratcliffe	Customs duties, miscellaneous receipts
Frank Sammartino	Individual income taxes

Spending Projections

Defense and International Affairs

Eugene Bryton	Defense
Kent Christensen	International affairs
Raymond Hall	Defense
Barbara Hollinshead	Defense
William Myers	Defense
Amy Plapp	Defense
Joseph Whitehill	International affairs
Ben Wolters	Defense

Spending Projections (continued)

Human Resources

Paul Cullinan	Social Security
Richard Curley	Supplemental Security Income, veterans' education
Cathy Ellman	Civil Service Retirement, Foreign Service Retirement
Alan Fairbank	Hospital Insurance
Karen Graham	Health programs
Holly Harvey	Supplementary Medical Insurance
Lori Housman	Public Health Service
Deborah Kalcevic	Education
Cory Leach	Unemployment Insurance, training programs
Julia Isaacs	Food Stamps, child nutrition
Donald Muse	Medicaid, Medicare
Janice Peskin	Aid to Families with Dependent Children, child support enforcement
Kathleen Shepherd	Veterans' benefits

Natural and Physical Resources

Kim Cawley	Energy
Douglas Criscitello	Commerce, disaster relief, and insurance
Peter Fontaine	Energy
Theresa Gullo	Water resources, conservation, and land management
James Hearn	General government, Agricultural Credit Insurance Fund, Outer Continental Shelf receipts
Hsin-Hui Hsu	Agriculture
Mary Maginniss	Deposit insurance
Eileen Manfredi	Agriculture

Spending Projections (continued)

Natural and Physical Resources (continued)

Marjorie Miller	Transportation, Federal Housing Administration
Marta Morgan	Community and regional development, general government
Andrew Morton	Agriculture
Deborah Reis	Recreation, pollution control, water transportation
Mitchell Rosenfeld	Air transportation, justice, Postal Service
Brent Shipp	Housing and mortgage credit
Michael Sieverts	Science and space, justice, other natural resources

Other

Janet Airis	Appropriation bills
Edward Blau	Appropriation bills
Paul Christy	Other interest
David Elkes	National Income and Product Accounts
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support
Danila Girerd	Credit budget
Glen Goodnow	Authorization bills
Vernon Hammett	Computer support
Sandra Hoffman	Computer support
Richard Krop	Civilian agency pay
Fritz Maier	Computer support
Rodney Rasmussen	Budget projections
Kathy Ruffing	Treasury borrowing, interest, and debt
Robert Sempsey	Appropriation bills
Karla Stein	Appropriation bills
Jeff Swersey	Computer support
Rick Williams	Computer support

GLOSSARY

The definitions of terms in this glossary reflect their usage in this report. Although such use is standard, the definitions may not apply in other contexts. Some entries sacrifice precision for brevity and clarity to the lay reader. For authoritative definitions of budget terms, the reader should consult *A Glossary of Terms Used in the Federal Budget Process*, prepared by the General Accounting Office.

Where appropriate, data sources are indicated, as follows:

> BEA denotes Department of Commerce, Bureau of Economic Analysis;
>
> BLS denotes Department of Labor, Bureau of Labor Statistics;
>
> CBO denotes Congressional Budget Office;
>
> Census denotes Department of Commerce, Bureau of the Census;
>
> FRB denotes Federal Reserve Board;
>
> NBER denotes National Bureau of Economic Research.

Aaa corporate bonds: The class of long-term corporate bonds judged by Moody's Investors' Service to have the lowest risk of default.

Aggregate demand: Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. Because purchases equal sales, aggregate demand equals gross national product. (BEA)

Appreciation: Gain in the exchange value of a currency. See also **Exchange rate**.

Appropriation: The legal authority for federal agencies to incur obligations and make payments from the Treasury for specified purposes. The appropriations for national defense and nondefense discretionary spending are generally provided each year in 13 appropriation bills, some or all of which may be combined in a single bill, called a continuing resolution. The appropriations for entitlements and other mandatory spending and for net interest are generally provided on a permanent basis in authorizing legislation.

Authorization: A substantive law that sets up or continues a federal program or agency. Authorizing legislation is normally a prerequisite for appropriations. For some programs, the authorizing legislation itself provides the authority to incur obligations and make payments.

Balanced Budget Act: Common shorthand for the Balanced Budget and Emergency Deficit Control Act of 1985, also commonly known as Gramm-Rudman-Hollings. As amended by the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987, the act sets deficit targets of $136 billion for fiscal year 1989, $100 billion for 1990, $64 billion for 1991, $28 billion for 1992, and zero for 1993. If the Office of Management and Budget estimates that the baseline deficit appears likely to exceed these targets by more than $10 billion (zero in 1993), the act requires across-the-board cutbacks in spending by sequestering budgetary resources.

Baseline budget projections: Projections of federal government spending, revenues, and the deficit assuming that current budgetary policies are continued without change. The Congressional Budget Act requires the Congressional Budget Office annually to prepare baseline budget projections for the next five fiscal years. The Balanced Budget Act requires both CBO and the Office of Management and Budget to report in August and October on budget baseline levels for the upcoming fiscal year.

The Congressional Budget Act does not prescribe how to calculate the baseline, but CBO's methodology for the baseline projections follows closely the specifications applicable to the Balanced Budget Act. For revenues and entitlement spending, the baseline generally assumes that laws now on the statute books will continue. For defense and nondefense discretionary spending, the projections for 1990 through 1994 are based on the 1989 appropriations, adjusted only for inflation.

Basis point: One-hundredth of 1 percent--for example, interest rates of 6.4 percent and 6.2 percent differ by 20 basis points.

Blue Chip consensus forecast: The average of about 50 forecasts surveyed by Eggert Economic Enterprises, Inc.

Budget: A detailed statement of actual or anticipated revenues and expenditures during an accounting period.

Budget authority: Authority provided by law to incur obligations that will result in immediate or future spending of federal government funds, except that budget authority does not include authority to insure or guarantee loans. Most budget authority arises from appropriations.

Budget deficit: Amount by which expenditures exceed revenues during a given period.

Budget function: One of 19 areas into which federal spending and credit activity are divided. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. The two remaining functions--net interest and undistributed offsetting receipts--do not address national needs but are included to make the budget complete.

Budget resolution: A resolution passed by both Houses of the Congress, but not requiring the President's signature, setting forth a Congressional budget plan for the upcoming fiscal year. The plan must be carried out through subsequent legislation, including appropriations and changes in tax and entitlement laws. The Congressional Budget Act establishes various mechanisms that are designed to hold spending and revenues to the targets established in the budget resolution.

Business cycle: Fluctuations in overall business activity accompanied by swings in the unemployment rate, profits, and interest rates. Over a business cycle, real activity rises to a peak value (its highest level to that date in the cycle), then falls until it reaches its trough value (its lowest level following the peak), whereupon it starts to rise again in a new cycle. Business cycles are irregular, varying in frequency and amplitude. (NBER)

Business fixed investment: Investment in nonresidential structures and producers' durable equipment. By convention, business fixed investment excludes residential investment, even if made by businesses. Fixed investment excludes investment in inventories. (BEA)

Capacity constraints: Limits to which output can be increased without also significantly increasing prices. Examples are shortages of skilled labor or of capital needed for production.

Capacity utilization rate: The seasonally adjusted output of the nation's factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. Capacity is defined as the greatest rate of output a plant can maintain with a realistic work pattern. (FRB)

Capital: *Physical capital.* Output that has been set aside for use in production, rather than consumed. By NIPA convention, private capital goods are composed of residential and nonresidential structures, producers' durable equipment, and business inventories. *Financial capital.* A claim on an individual, business, or government represented by a security such as a mortgage, stock certificate, or bond. Issuing such securities provides the resources to buy physical capital.

Capital cost recovery provisions: Provisions of the tax code for deducting the depreciation of capital goods as a business expense. The Tax Recovery Act of 1986 tries to make such "tax depreciation" correspond more closely than before to economic depreciation--the properly measured loss of value.

Capital gain: Amount by which an asset has increased in value since its purchase. Capital gains "accrue" as the asset rises in value, and are "realized" and subject to tax when the asset is sold.

CCC: See **Commodity Credit Corporation.**

Civilian unemployment rate: Unemployment as a percentage of the civilian labor force--the labor force excluding resident armed forces personnel. (BLS)

Coincident indicator: An economic variable that reaches its peaks and troughs at about the same time as the corresponding peaks and troughs of the business cycle.

Collective bargaining: Bargaining between union and management over wages and other terms of employment.

Commodity Credit Corporation (CCC): An agency of the Department of Agriculture that supports farm incomes and prices through direct payments to farmers and the purchase and sale of farm commodities. Net purchases of commodities in CCC's price support activities appear as part of the federal government's purchases of goods and services in the National Income and Product Accounts, but function more like changes in business inventories.

Compensation: All income due to employees for their work during a given period. Compensation includes wages and salaries as well as fringe benefits and employers' share of social insurance taxes. (BEA)

Constant dollar: Measured in terms of prices of a base period, currently 1982 for most purposes, to remove the influence of inflation. Compare with **Current dollar**.

Consumer durable goods: Consumer goods that, on average, will last more than three years--for example, autos, furniture, or appliances.

Consumer goods: Goods bought by households for their own use.

Consumer Price Index: See **CPI-U** and **CPI-W**.

Consumption: Total purchases of goods and services during a given period by households for their own use. (BEA)

Cost-of-living clause: Provision of a labor contract stipulating that, other things being equal, pay will rise in a specified way based on the increase in some measure of consumer prices, typically the CPI-W.

CPI-U: An index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers during a base period. (BLS)

CPI-W: An index of consumer prices based on the typical market basket of goods and services consumed by urban wage earners and clerical workers during a base period. (BLS)

Credit budget: An addition to the budget that provides a measure of new federal credit activity by recording the gross amount of direct loan obligations and primary loan guarantee commitments issued in a given year. In contrast, the budget counts a direct loan as an outlay when the loan is disbursed, and counts repayments of principal and interest as reductions in outlays. Loan guarantees do not affect federal budget outlays unless there is a default. If the government must make good on its guarantee, the payment is recorded as a budget outlay.

Current dollar: Measured in the dollar value of the period; nominal. Compare with **Constant dollar**.

Deflator: See **Implicit deflator**.

Depreciation: Decline in the value of a currency or a capital good. When applied to a capital good, the term usually refers to loss of value because of obsolescence or wear.

Disposable (personal) income: Income received by individuals, including transfer payments, less personal taxes and fees paid to government. (BEA)

Domestic demand: Total purchases of goods and services, regardless of origin, by resident consumers, businesses, and governments during a given period. Therefore, domestic demand equals gross national product plus imports minus exports. (BEA)

Employment cost index: Measure of the price of labor (compared with a base period) that is free from the influence of employment shifts among industries or occupations. (BLS)

Entitlements and other mandatory spending: Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly, by defining eligibility and setting the benefit or payment rules, rather than directly through the annual appropriation process. The best-known entitlements are the major benefit programs, such as Social Security and Medicare; other entitlements include farm price supports and interest on the federal debt. Mandatory programs--such as the deposit insurance activities of the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation--are also included, because the government must carry out the commitments undertaken.

Exchange rate: The number of units of a foreign currency that can be bought with one unit of the domestic currency. Exchange rates are often combined in an index. The most commonly used index for the dollar exchange rate compares the currencies of 10 industrial countries with the dollar. (FRB)

Expansion: A phase of the business cycle that extends from the trough to the next peak. (NBER)

Federal funds rate: Overnight interest rate at which financial institutions borrow from and lend to each other their monetary reserves (federal funds). A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Reserve system: The agency responsible for conducting monetary policy and overseeing credit conditions in the United States.

Final sales: Gross national product minus the change in business inventories. (BEA)

Fiscal policy: The government's choice of tax and spending programs, which influence the level, composition, and distribution of output and income. An easy fiscal policy stimulates the growth of output and income, while a tight fiscal policy restrains their growth. Movements in the standardized-employment budget deficit constitute one overall indicator of the tightness or ease of federal fiscal policy--an increase relative to potential GNP suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly carry out federal fiscal policy.

Fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end--for example, fiscal year 1990 begins October 1, 1989, and ends September 30, 1990.

Fixed investment: Investment in fixed capital, such as buildings, machines, or transporation equipment; private domestic investment excluding the change in business inventories. (BEA)

Fixed-weighted price index: An index that measures overall price (compared with a base period) without being influenced by changes in the composition of output or purchases. See also **Implicit deflator.**

Fringe benefits: Compensation of employees not paid directly as wages and salaries or as employers' share of social insurance taxes. Fringe benefits primarily include employer contributions to pension plans, life and medical insurance plans, and workers' compensation--an insurance fund to provide for job-related injury or illness. (BEA)

GDP: See **Gross domestic product.**

GNP: See **Gross national product.**

Government purchases of goods and services: Purchases from the private sector (including compensation of government employees) made by government during a given period. Unlike government expenditures, purchases exclude transfer payments (which include grants and interest paid). (BEA)

Government-sponsored enterprises: Enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Major examples are the Federal National Mortgage Association, the Student Loan Marketing Association, and the Federal Home Loan Banks. As private corporations, they are excluded from the budget totals.

Gross domestic product (GDP): The total current market value of all goods and services produced domestically during a given period. GDP differs from GNP by excluding net income (primarily capital income) that residents earn abroad. (BEA)

Gross national product (GNP): The total current market value of all goods and services produced in a given period by residents of a country and the assets they own. (BEA)

Household survey: Monthly sample survey of households to gather information on the labor force, total employment, and unemployment. (BLS)

Implicit deflator: An overall measure of price (compared with a base period) given by the ratio of current dollar purchases to constant dollar purchases. Changes in an implicit deflator, unlike a fixed-weighted price index, reflect changes in the composition of purchases as well as in the prices of goods and services purchased. (BEA)

Index: An indicator or summary measure that defines the overall level (compared with a base) of some aggregate, such as the general price level or total quantity, in terms of the levels of its components.

Inflation: Growth in a measure of the general price level, usually expressed as an annual rate of change.

Inventories: Stocks of goods held by businesses either for further processing or for sale. (BEA)

Investment: *Physical investment.* Current product set aside during a given period to be used for future production; an addition to the stock of capital goods. By NIPA convention, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment.* Purchase of a financial security.

Labor force: The number of people who have jobs or are available for work and actively seeking jobs. (BLS)

Labor force participation rate: The labor force as a percentage of the noninstitutional population aged 16 years or older. (BLS)

Labor productivity: Average real output per hour of labor. (BLS)

Leading indicator: An economic variable that reaches its peaks and troughs earlier than the corresponding peaks and troughs of the business cycle.

Long-term interest rate: Interest rate earned by a note or bond that matures in 10 or more years.

M1: A relatively narrow measure of the U.S. money supply. It primarily consists of the public's (excluding banks') total holdings of currency, traveler's checks, and checking accounts. (FRB)

M2: A broader measure of the U.S. money supply than M1. It primarily consists of M1 plus the public's holdings of: (1) savings and small (less than $100,000) time deposits and money-market deposit accounts held at depository institutions; and (2) accounts at money-market mutual funds. (FRB)

Means-tested programs: Programs that provide cash or services to low-income people who meet a test of need. Most means-tested programs are entitlements--for example, Medicaid, Food Stamps, Supplemental Security Income, Family Support, and Veterans' Pensions--but a few, such as subsidized housing and various social services, are funded through discretionary appropriations.

Monetary policy: The strategy of influencing the courses of the money supply and interest rates to affect output and inflation. An easy monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A tight monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve system conducts monetary policy in the United States.

Monetary reserves: The amount of funds that banks and other depository institutions hold as cash or as deposits with the Federal Reserve system. The Federal Reserve system specifies given amounts of reserves that must be held for every dollar of deposits. Such "reserve requirements" allow the Federal Reserve system to influence the money supply. (FRB)

Money supply: Private assets that can readily be used to make transactions or can easily be converted into those that can. See **M1** and **M2**.

National defense: Spending recorded in the national defense function (budget function 050), consisting primarily of the military activities of the Department of Defense, which are funded in the annual defense and military construction appropriation bills. It also includes the defense-related functions of other agencies, such as the Department of Energy's nuclear weapons programs.

National Income and Product Accounts (NIPA): Official U.S. accounts that detail the composition of GNP and how the costs of production are distributed as income. (BEA)

National saving: Total saving by all sectors of the economy: personal saving; business saving (corporate after-tax profits not paid as dividends); and government saving (budget surplus or deficit--indicating dissaving--of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (BEA)

Net exports: A country's exports less its imports. (BEA)

Net interest: *In the federal budget.* Federal interest payments to the public, as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the National Income and Product Accounts.* The income component of GNP paid as interest; primarily interest that domestic businesses pay, less interest they receive. The NIPA treat government interest payments as transfers and net them from GNP.

Net national product (NNP): Gross national product minus depreciation of private capital. (BEA)

Net national saving rate: Net national saving as a percentage of NNP.

Net national saving: National saving minus depreciation of private capital.

NIPA: See **National Income and Product Accounts**.

NNP: See **Net national product.**

Nominal: Measured in the dollar value (as in nominal output, income, or wage rate) or market terms (as in the nominal exchange or interest rate) of the period. Compare with **Real.**

Nondefense discretionary spending: Spending for programs controlled by the 11 annual nondefense appropriation bills. The category encompasses most of the government's activities in the areas of international affairs, science and space, transportation, medical research, environmental protection, and law enforcement, to name only a few. About one-fifth of nondefense discretionary spending goes toward pay and benefits for civilian agency employees, and about one-third reflects grants to state and local governments.

Nonfarm business productivity: Labor productivity in the nonfarm business sector. (BLS)

Nonresidential structures: Primarily business buildings such as industrial, office, and other commercial buildings; and structures such as mining and well shafts and those of public utilities. (BEA)

Off-budget: Spending excluded from the budget totals by law. The Balanced Budget Act requires that the revenues and outlays of the two Social Security trust funds be shown as off-budget. Social Security is included in the totals, however, in determining whether the Balanced Budget Act's deficit targets are being met. As a result of the Social Security Amendments of 1983, Medicare's Hospital Insurance Trust Fund will be moved off-budget beginning with the 1993 budget.

Office vacancy rate: Total unoccupied office floor space offered for lease or rent as a percentage of all private office floor space available in the metropolitan areas sampled. (Coldwell Banker)

Offsetting receipts: Funds collected by the government that are recorded as negative outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts reflecting agencies' payments to retirement and other funds on their employees' behalf, and they simply balance payments elsewhere in the budget. The remaining offsetting receipts come from the public and generally represent voluntary, business-type transactions. The largest items are the flat premiums for Supplementary Medical Insurance (Part B of Medicare), timber and oil lease receipts, and proceeds from the sale of electric power.

Operating deficit: *Of state and local governments.* Budget deficit excluding revenues and expenditures of their social insurance funds (primarily retirement funds for employees). (BEA)

Organization of Petroleum Exporting Countries (OPEC): The group of oil-rich countries that tries to determine the price of crude oil (given demand) by agreeing to production quotas among its members.

Outlays: The liquidation of a federal obligation, generally by issuing a check or disbursing cash. Sometimes obligations are liquidated (and outlays occur) by issuing agency notes, such as those of the Federal Savings and Loan Insurance Corporation. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not when it is paid.

Outlays may be for payment of obligations incurred in previous fiscal years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior-year budget authority and in part from budget authority provided for the current year.

Peak: See **Business cycle.**

Personal saving: Disposable personal income that households do not use for consumption or interest payments during a given period. (BEA)

Personal saving rate: Personal saving as a percentage of disposable personal income. (BEA)

Potential GDP: Level of GDP estimated to be consistent with a constant rate of inflation. (CBO)

Potential GNP: Level of GNP estimated to be consistent with a constant rate of inflation. (CBO)

Private saving: Saving by households and businesses; personal saving plus after-tax corporate profits less dividends paid. (BEA)

Producers' durable equipment: Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (BEA)

Public infrastructure: Government-owned goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and buildings.

Real: Adjusted to remove the effect of inflation so that real (constant-dollar) output represents volume, rather than dollar value, of goods and services, and real income represents power to purchase real output. Real data are constructed by dividing the corresponding nominal data by a price index or deflator. A real interest rate is a nominal interest rate minus the inflation rate of a given price index. Compare with **Nominal**.

Recession: A phase of the business cycle that extends from a peak to the next trough. Real GNP usually falls throughout the recession. (NBER)

Rental vacancy rate: Number of vacant housing units for rent as a percentage of total rental housing units in the areas sampled. (Census)

Reserves: See **Monetary reserves.**

Residential investment: Investment in housing, primarily consisting of construction of new single-family and multifamily housing and alterations and additions to existing housing. (BEA)

Sequestration: The across-the-board cancellation of budgetary resources (new budget authority, new loan guarantees, new direct loans, obligation limitations, defense unobligated balances, and other spending authority as defined in section 401(c)(2) of the Congressional Budget Act) used to enforce the deficit targets in the Balanced Budget Act. Sequestration is triggered if the Office of Management and Budget estimates that the deficit for the upcoming fiscal year will exceed the target by more than $10 billion. No $10 billion margin is pro-vided for fiscal year 1993, when the deficit target is zero. See also **Balanced Budget Act.**

Short-term interest rate: Interest rate earned by a debt instrument that will mature within one year.

Standardized-employment budget deficit: The level of the federal government budget deficit if the economy is operating at potential GNP. (CBO)

Supply shock: An unforeseen change in output that producers will supply. Examples include bumper crops, crop failures, or sudden restrictions on the supply of oil as occurred in 1973-1974 and 1979-1980.

Ten-year Treasury note: Interest-bearing note issued by the U.S. Treasury that is redeemed in 10 years.

Three-month Treasury bill: Security issued by the U.S. Treasury that is redeemed in 91 days.

Transfer Payments: Payments in return for which no good or service is received--for example, welfare or Social Security payments or money sent to relatives abroad. (BEA)

Trough: See **Business cycle**.

Underlying rate of inflation: Rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price--food, energy, and used cars.

Unemployment: The number of jobless people who are available for work and actively seeking jobs. (BLS)

Unemployment rate: Unemployment as a percentage of the labor force. (BLS)

Unit labor costs: Average labor cost (compensation) incurred in producing a unit of output. (BLS)

Velocity: The ratio of GNP to a measure of the money supply--for example, GNP divided by M2 gives M2 velocity. Velocity indicates how often, on average, a unit of money is exchanged in producing a unit of GNP.

Yield: The average annual rate of return on a security, including interest payments and repayment of principal, if held to maturity.

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